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Articles

Alcohol and Drug Use in the Federated States of Micronesia

by Francis X. Hezel, SJ

1997 [ALCOHOL & DRUGS](#)

An Assessment of the Problem with Implications for Prevention and Treatment

by MICRONESIAN SEMINAR

Pohnpei, FSM

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[Preface A CULTURAL CAUTION](#)



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In Western societies drug use is usually looked upon as an indication of deviance to a greater or less degree, depending on the type of drug. Pacific societies, however, have a long tradition of drug use fully incorporated into the culture and surrounded, in some cases, by an elaborate etiquette. The two outstanding examples are betelnut in the Western Carolines (Yap and Palau) and kava in the Eastern Carolines (Pohnpei and Kosrae).

Even drugs introduced from abroad have been circumscribed by a set of cultural parameters that can be missed by Western social workers. *Tuba* (fermented sap of the coconut palm), which reached many of the islands of Micronesia by the end of the last century and is still in common use today, has been fully assimilated into the life of outer island dwellers in Yap. The circle of *tuba* drinkers that gathers at the end of a typical day on one of these islands includes almost all the adult males on the island. This drinking circle is more than a form of male relaxation; it is something of a bonding ritual that offers men the opportunity to do community planning and sometimes air their problems.

Other forms of alcohol such as beer and liquor, like almost everything else adopted from the West, serve certain positive functions in these island societies and are bounded by cultural conventions, even if none of this is immediately apparent to the foreign eye. Typically in Micronesian societies men drink and women do not. Young men often drink with a reckless abandon that older and presumably wiser men are expected to eschew. Certain kinds of drunken behavior are shrugged off as "normal," while other, more offensive and destructive actions call for retribution.

We must, therefore, beware of regarding drugs as simply a counter cultural phenomenon, for they are in fact very much a part of today's culture in the Pacific. Drug use is not simply a dark marginal corner of society, a cultural vacuum, into which certain individuals have been pushed by the anomie that often accompanies rapid modernization. Still less can it be explained as a reaction to colonial oppression. Drug use may be a refuge, but it is a culturally sanctioned refuge with a logic and guidelines recognized by the society.

To view drug use as a cultural rather than counter cultural phenomenon in this way is not to deny that drug use unleashes social problems. The pathways of Micronesian societies, like those of other places, are littered with the wrecks of lives ruined by drugs. Anyone who has watched the line of women and children streaming from their houses with mats under their arms on a payday Friday afternoon to spend the night in the boonies is aware of the apprehension that drinking causes for the more vulnerable members of the family. The smashed cars and the weekend trauma cases in the emergency room are further testimony to the damage that drugs can wreak.

This report assumes that drug use must be understood in its sociocultural context before successful strategies can be devised for controlling drug use. Unless we understand the reasons Micronesians use drugs, the situational contexts of this use, and the array of social controls available in these island cultures, our attempts to provide treatment will be fruitless. The decision to sniff gas, to smoke marijuana, to drink case after case of beer, or even to snort coke or smoke "ice" may be an individual choice, but it is conditioned by the social environment and the cultural norms of the

community. Micronesians, like other Pacific islanders, are social animals to a much greater degree than Westerners. The drugs on which they rely are almost always enjoyed with others rather than alone, take their meaning from their cultural milieu and are subject to the same prohibitions and sanctions of the island society. Those who will attempt to find effective ways of addressing the drug problem ignore this fact at their own peril.

INTRODUCTION

Purpose of this Report

The Center for Substance Abuse Treatment (CSAT) has undertaken an initiative with states, along with territories and the Freely Associated States in the Pacific, to assess the demand and need for substance abuse treatment services at the state and sub-state levels. CSAT contracted this study, as it has studies in other regions, in order to assess the magnitude of the alcohol/drug problem in Federated States of Micronesia (FSM). Employing sound methodology, this study was to establish prevalence rates for substance abuse and identify the areas and populations in greatest need of treatment services. The supposition was that carefully established rates alone would provide adequate baseline data for planning and funding purposes inasmuch as the relevance of treatment methods need not be questioned. The underlying question that CSAT studies sought to answer was how much expansion in treatment facilities would be necessary to accommodate all potential users.

This study does not share the assumption that drug and alcohol abusers in the Pacific Islands will respond to the treatment methods commonly employed in the US. Because of this, the thrust of this present study may differ from similar studies conducted in the states. The author feels that it is essential to review the sociocultural context of alcohol and drug abuse, along with the meaning that the use of these drugs has for Micronesians, even if this leads to what some would consider a disproportionate emphasis on qualitative rather than quantitative data.

Likewise, this study will attempt to review the various types of treatment approaches currently being used by agencies operating in FSM. While not intended as an evaluation of these agencies, the last chapter in this report will point to approaches that might be more effective in an island society.

Given the small size of the island communities being studied, that data generated by this study may be handled more simply than is usually the case in a survey of this type. We have attempted to highlight the most significant correlations between drug use and social status markers. We also present projections on the size of the drug-using populations—projections that we feel can be made with a good level of confidence. These projections together with the profiles that have been derived from the survey data, when used with the information on the social context of drug use that this study attempts to provide, should furnish a useful basis for working out treatment strategies.

At bottom, however, the purpose of the study remains the same as others authorized and funded by CSAT—that is, to establish substance abuse prevalence rates for FSM, which, viewed against the distinctive cultural features of the area, can be converted into comprehensive estimates of service need and demand that can be used for planning, program management and policy making.

Accordingly, the goals of this study are:

- To assess the absolute level of alcohol/drug abuse treatment need in the four states by providing solid prevalence rates for the total population and the different age-sex cohorts.
- To provide a sound assessment of the sociocultural factors peculiar to Micronesian societies, including the functions that alcohol and drugs serve, the social context in which they are used, and the meanings they have for Micronesians.
- To inventory the agencies, private and public, and the kinds of prevention and treatment programs they offer.
- To suggest what the most effective and culturally appropriate approaches in providing treatment and support for drug and alcohol abusers.

There are two other goals endorsed by CSAT that must be addressed: training in the collection and use of data, and networking among non-governmental organizations (NGOs). Both are important goals but could not be met, for various reasons, as this report was being prepared. Our hope is that the process that follows the production of this report will offer an opportunity to meet these additional goals. We anticipate using this report as a teaching tool for representatives of government substance abuse offices and heads of NGOs to help them develop a facility in using and gathering data of the kind presented here. The public presentation of this data to these same representatives will provide an opportunity to do the networking among various agencies envisioned by those who funded this project.

Scope of this Study

The study covers the Federated States of Micronesia, a newly independent nation that is bound to the US by the terms of a document known as the Compact of Free Association. The nation acquired full self-government in October 1986. At the end of World War II, the four major island groups comprising the FSM were joined with Palau, the Marshalls and the Northern Marianas in a UN trusteeship administered by the United States. For sixty years before the US assumed authority over the islands, these islands had been subject to the colonial administration of three other countries.

The Federated States of Micronesia is a nation of small islands, with the largest, Pohnpei, having an area of about 100 square miles. The total population of the country, according to a 1994 census, is 105,506. The FSM has four states-Yap, Chuuk, Pohnpei and Kosrae-with pronounced language and cultural differences between them. Moreover, each of the states except Kosrae contains more than one ethnic subgroup. For this study representative sampling was done in each of the four states. The populations of the states in 1994 were: Chuuk 53,319; Pohnpei 33,692; Kosrae 7,317; and Yap 11,178.

Although the principal focus of this study is on alcohol, since it is far more widely used than any of the others and is generally thought to be the most damaging, the study also includes marijuana, inhalants and "hard drugs." This last term is used to embrace illegal drugs other than marijuana taken for non-medicinal purposes (that is, cocaine, heroin, amphetamines, and hallucinogens). The study does not include tobacco, nor two widely used locally grown substances-namely, sakau (sometimes known as kava) and betelnut. These last items were excluded from the survey because of the fear that the study would lose its principal focus on that narrow range of drugs whose use can be said to contribute to social problems (as distinguished from health problems) in Micronesia.

Contracting Agency

Micronesian Seminar, a non-profit pastoral-research institute sponsored by the Society of Jesus in Micronesia, was contracted by the Center for Substance Abuse Treatment to undertake this needs assessment for drug and alcohol abuse treatment in the Federated States of Micronesia. The Micronesian Seminar, which is incorporated under the laws of FSM, has a long history of social research in Micronesia and is widely known in this part of the Pacific and beyond. In 1985-1986, under contract with the Justice Improvement Commission, the Micronesian Seminar directed a regional-wide study of child abuse and neglect. In 1988 it conducted a two-year survey of schizophrenia and other psychoses in the FSM, Palau and the Marshalls. For twenty years the Seminar has been researching the high incidence of suicide in Micronesia, work that has issued in several published papers on the subject.

The director of the Micronesian Seminar, Fr. Francis X. Hezel, was the project director. He was responsible for drawing up the work plan, analysis of all data, and writing the final report. He was assisted by James Mormad, an FSM citizen who had worked for years at the private Jesuit high school in Chuuk and later in the FSM National Government. His major responsibility was conducting the survey and collecting the data.

Chapter 1: RESEARCH METHODOLOGY

General Research Design

In keeping with the directive allowing each state to determine the appropriate methodology in gathering information for establishing prevalence rates, we have elected not to adopt the conventional methods used in most CSAT-funded surveys-that is, personal interviews, conducted face-to-face or via telephone, with a sample of the population. Instead, for this study we have employed an indirect approach that makes use of key informants to obtain information on an entire community.

The methodology we have chosen is, admittedly, more problematic, and the epidemiological data may be challenged as little better than "second-hand" or "mere hearsay" and the prevalence rates derived from the data regarded as corrupted. There is an obvious appeal in personal interviews done with a well-designed instrument: they are neat, simple to administer and can generate good figures.

Even so, we believe that the problems with the direct interview method in Micronesia outweigh its advantages. In many Pacific societies, personal interviews on life problem areas are not culturally appropriate and often yield information that is not reliable. Micronesians dislike talking about their own problems or those of other members of their family to outsiders. Whatever promises may be made, anonymity is impossible and confidentiality extremely rare in small island societies. In past surveys that have dealt with culturally sensitive subjects (eg, child abuse, suicide), we have had reason to suspect the reliability of information derived in direct interviews, or even with the individual's family. In these studies we have found it preferable to rely on information supplied by others in the community outside the immediate family. Hence, we have adopted the same data collection procedures for this report that we have successfully employed in other studies in Micronesia.

Another difference in approach is the way in which subjects were chosen. Rather than using random selection, as many epidemiological surveys do, we opted to survey everyone-men, women and children-in several preselected communities from each state. The communities were chosen with an eye to providing a good representation of the various ethnic groups, religious backgrounds, and stages of relative acculturation as measured by position on the rural-urban residence scale. Each community selected contained between 200 and 400 persons, including children. All members of each household were screened for any alcohol and drug users, past or present, and individual forms were completed for all of those with a history of alcohol or drug use. The questionnaire form in the interviews was adapted from the core instrument prepared by the National Technical Center for Substance Abuse Needs Assessment (NTC). (The survey interview forms can be found in Appendix 3 of this report.)

Our preference for a community survey approach rather than random sampling is grounded in the social realities of a Pacific society. The community survey yields a picture of the behavioral patterns of a social group rather than an individual isolate. In a place like Micronesia, with its enormous stress on social interaction and communal norms of

behavior, we are likely to derive information that will better help us understand the etiology of the drinking and drug problem in the lives of individuals and suggest more effective forms of prevention and treatment.

The coded individual data were entered in the computer and a check was made against the 1994 census for FSM to verify that the data represented at least 5 percent of the total population and that the distribution of the persons surveyed corresponded to the breakdown of the general population by state, gender, age-cohort, residence and ethnicity. Where there appeared to be significant over- or under-representation in any of these categories, adjustments were made to compensate for the differences before calculating prevalence rates and making projections on treatment.

All general population figures used for comparative purposes in this study were taken from the 1994 FSM census and used without adjustment for population growth. Since the census, taken in September 1994, preceded the start of our survey (May 1996) by less than 20 months, the increased accuracy of the population data did not seem proportional to the effort involved in making such adjustments. This is all the more true since yearly population growth has declined substantially everywhere in the FSM, as the recent census indicates.

The survey instrument allowed us to generate two types of prevalence rates: lifetime prevalence and point prevalence within the last 12 months. The current prevalence rate is by far the more important and more reliable of the two, and it is this that will be presented in the tables. Where there is no indication to the contrary, the reader can assume that the twelve-month point prevalence rate is referred to in all figures. Where significant findings appear, lifetime prevalence rates will be given as well.

Selection of Representative Communities

The communities to be surveyed were chosen so as to provide a good balance of ethnicity, religion, and position on the scale of distance from modernization. The selection process aimed at picking a broad geographical range within a state. Hence, we attempted to select some communities that contained large pockets of off-islanders and an ethnic mix, and others that were made up almost exclusively of the ethnic majority; some strongly Protestant communities and others that were predominantly Catholic; some in or close to the main town, others at a considerable distance from the town and its amenities. We attempted to make this selection with an eye to the composition of the population of the state, but without adopting rigorous statistical norms.

Each community constituted a village or, if the village was too large to be surveyed in its entirety, an identifiable section of a village. (The ideal community size was established at between 200 and 400 persons of all age groups.) All households within this area were interviewed to avoid any hidden bias that might be at work in random selection.

The total number of communities surveyed was proportionate to the size of the state population; they totaled three in Kosrae, five in Yap, seven in Pohnpei, and nine in Chuuk. The ideal total state sample sizes, at 5 percent of the population, would have been: Chuuk 2,650; Pohnpei 1,770; Yap 560; and Kosrae 370.

In fact, the survey samples in all the states exceeded these numbers. The actual sample size for each state was: Pohnpei 2,284; Kosrae 450; Chuuk 2,857; Yap 952 (Tables showing the breakdown of the state samples for each age group and sex are found in Appendix 4. The comparative breakdown of the general population and the survey sample into age groups and sex by percentage is also included in the appendix.)

The communities sampled in each state and the sample size for each are given below. Additional background on the communities and their characteristics can be found in Appendix 2.

Pohnpei: Enipein (369), Saladek (428), Sokehs (302), Ohmine (382), Mesihsou (264), Palipowe (293), Mokil (246)

Kosrae: Lelu (121), Utwa (125), Malem (113)

Chuuk: Kuchua (293), Seletiw (351), Sapuk (323), Tunnuk (316), Sopou (294), Sapore (318), Nomwin (307), Nama (354), Foup (301)

Yap: Maa/Thol (213), Ngolog (214), Kanifay (216), Falalop (150), Mogmog (159)

Sample Stratification

The interview data for each state were checked against the population figures for that state from the FSM census of 1994 to ensure that the data represented a 5 percent sample. The interview data were then cross-checked by sex, age, ethnicity, and position on the urban-rural scale to determine whether it was representative of the percentage of the state population as presented in the FSM census. Where the data for sex and age was under-representative or over-representative, it was weighted accordingly in calculating any projections for the general population.

The study excluded all children below the age of 10. It was decided to make the cut-off point 10 rather than 15 since we believed that in using the latter age we would run the risk of eliminating boys and girls in their young teens who might be inhaling gas and glue. The results of the survey not only supported this belief but indicated that some of those in their early teens use alcohol as well.

The age matrix used in our tables has been adapted from the standard US matrix so as to conform better to the life-cycle of the Micronesian societies studied. The age cohorts used here are: 10-14, 15-19, 20-29, 30-44, 45-64, and 65+. A breakdown into five-year age cohorts in the teens is helpful since during these years many young islanders begin using drugs and alcohol. On the other hand, the age of 18 is not a significant boundary marker for Micronesians as it is for Americans. In many cases the most intense period of alcohol and drug use comes during the 20s. The next 15 years of life, between the ages of about 30 and 44, mark young adulthood and are a transitional time for many male islanders. Often a heavy drug user or drinker will modify his intake or cease altogether as he approaches the age of responsible maturity. By the age of 45 or so, a man is expected to attain full maturity and exercise control over the impulses that may have dominated his life as a young man.

The numerically significant ethnic groups in the states of FSM are these: Yapese, Yapese Outer Islander, Chuukese, Chuukese Western Island, Mortlockese, Pohnpeian, Pingelapese, Mokilese, Nukuoroan, Kapingamarangi, Kosraean, American, Chinese, and Filipino. Not all are identified in the results of the survey, either because the sample size was too small to be reliable or because those surveyed were not always identified by their ethnic origins. Many Mortlockese surveyed on Pohnpei, for instance, were identified as "Pohnpeian" rather than "Mortlockese" even if both parents had been born in the Mortlocks.

The urban-rural spectrum can be roughly divided into three categories: town dwellers, village dwellers, and inhabitants of the outer atolls. Town dwellers are those who live in or near the port towns, the commercial centers that enjoy a relatively modern living standard not found elsewhere. The village dwellers are those who reside in the rural areas of the high islands, often at some distance from the town. Local food is eaten there and little wage employment is to be found. Finally, the coral atolls, which often lie hundreds of miles away from the state capitals, have the simplest life-style and the fewest amenities of modern life. Their contacts with the population centers are tenuous and infrequent.

Interview Methods

The field investigator, a Micronesian with long work experience in the FSM National Government, selected between two to four persons to serve as key informants for each community. In one or two cases, the informants were expatriates with an intimate knowledge of the community, but usually they were Micronesians residing in the community who were familiar enough with the families to possess detailed information on all the members of the households and were willing to do so on the guarantee that they and the information they furnished would be held strictly in confidence. Church ministers and older persons with a high position in the community were excluded in favor of younger adults who might be more knowledgeable about the behavior of that segment of the population engaged in drug use. An attempt was made to include at least one female informant to ensure adequate coverage of women in the community.

Working with the field investigator, the informants completed a sheet on each household listing all the members of the household, their age and sex, their religion and ethnicity. Next to each name the informants indicated whether that person had ever used drugs in his/her life. This preliminary survey of the community served as a screen to identify individuals about whom more detailed information was to be collected.

Once the household survey forms were finished, an individual interview sheet was completed for any individual known to have been using alcohol or drugs at any time. In addition to basic biodata-sex, age, marital status, educational background, occupational status, and travel abroad-the sheet recorded detailed information on the type of drugs used, the frequency and extent of use, the seriousness of the problem, and the kind of treatment sought, if any. The interview protocol used was a heavily modified and abbreviated form of the core instrument designed by NTC.

It should be noted that the names were retained on these interview sheets, as well as in the computer files, so that any additional information that might be found from additional sources such as court records, police files, and case reports, might be added to the individual's record. We felt that names were necessary if we were ever to compile some "thick data" on individual users that might help us determine key factors that put persons at risk for substance abuse problems. Once the data collection was completed, however, the names were deleted from the files to maintain confidentiality.

Although we were confident that a key informant methodology was far more suited to Micronesia than direct interviews, the reliability of third-person interview data remained a serious question. As a check on the reliability of our data, therefore, we conducted direct personal interviews with a small sample (10-12 persons) from each community. These persons were a convenience sample, but selected to include a male and female from each of the major age cohorts employed in this study. This yielded about 200 direct interviews throughout the four states. A random preliminary check was then made to determine the extent of discrepancies between the direct interviews and the third-person interviews. In this preliminary comparison of the interview results for ten persons, the correspondence of the data was strikingly close. There were no discrepancies at all in the reports on the type of drugs used and surprisingly little on the amount consumed; the greatest variation appeared in the reported frequency of drug use, with the third-person interview reporting a lower frequency than the direct personal interview.

Another check of the different interview sheets was made of 20 more persons after all the data were entered in the computer, but this check produced results very close to the first one. Given the positive results of these informal checks, we decided against doing a more careful tally of the discrepancies on the grounds that they were not significant enough

to justify the time and trouble. The close correspondence seen in these reliability checks confirmed our judgment that sound data could be gathered by a key informant study in communities that are as small and closely knit as the ones that we were studying in Micronesia.

Data Processing and Analysis

As the interviews in each community were completed, they were checked for completeness and consistency by the field investigator. When this was done, the survey results were entered on the computer in a dBASE IV file, with a field for each of the questions asked. A computer record was established for all individuals surveyed, even those who had no history of drug use of any kind, so that statistical tables could be more easily generated.

When all the computer entries for a state were completed, the computer entries were checked for keying errors through the use of the EpiInfo 6 statistical frequency function. When any errors were corrected in the dBASE IV file and the record numbers for each community were checked against the original interview forms, we began generating tables on the use of each drug. Tables showing age-sex distribution of current drug users were first generated, and then tables indicating the frequency and amount of the drug consumed.

After the tables were reviewed, the decision was made as to what correlations should be examined. Numbers and percentages for such correlations were generated from the dBASE IV file, but further statistical operations to determine the confidence level and p-value were performed through the EpiInfo 6 program. These were used in the tables and narrative only to the degree that was deemed appropriate.

Projections of total current drug users on the island were made on the basis of the sex-age breakdowns of the survey data, since age and sex correlated more strongly with drug use than any other factors. Each age-sex group of persons surveyed was compared with the same group in the general population to derive the percentage of the sample before projections were made for the users in this category.

Collection of Other Data

Despite the reporting requirements that are built into most US federal program grants, data collection and maintenance remains uneven in the FSM. This hampered us in our attempt to gather data on social indicators of alcohol and drug abuse. Figures on alcohol imports by quantity and type were not available; only figures on the dollar amount of imports could be obtained. Deaths due to alcohol-related illness, accidents, homicide and suicide were recorded by the state departments of health services, but the criteria used in determining these deaths seems to have varied from state to state. In the initial data obtained from Chuuk, for example, the list of alcohol-related diseases was longer and the number of deaths in each category much larger than one would project. Moreover, the number of suicides recorded by the states was fewer in almost every case than the number generated by the author from the data-base he has maintained on suicide cases for the past twenty years.

In the end, we used whatever reliable data we could get on social indicators of drug and alcohol abuse. Where possible, we attempted to get figures for the past five years. Social indicators for which reasonably good data was found are: yearly alcohol imports by dollar value; per capita yearly expenditures on alcohol; alcohol-related deaths (as recorded by the hospitals); arrests for alcohol-related crimes as a percentage of total arrests; suicides occurring while under the influence of alcohol or drugs as percentage of total suicides.

Chapter 2 :ALCOHOL

The Cultural Context

History of Alcohol Use

Alcohol is clearly a Western contribution to Micronesia. Before the first intensive European and American contact with the islands in the mid-nineteenth century, Micronesians possessed no knowledge of fermentation or distillation. Even *tuba*, the coconut toddy made from the fermented sap of the blossom of the tree which is widely used today in the coral atolls, appears to have been a late arrival. Alcohol was introduced to all parts of Micronesia by whalers and copra traders in the last century and drinking soon became an important male recreational pastime in many places.

From the beginning of the twentieth century, the colonial powers that ruled Micronesia imposed a prohibition on all alcoholic beverages for island people, although the rigor with which the ban was enforced varied at times. This policy was continued by the American administration after World War II until 1959, when the US rescinded the ban in response to a growing reaction among Micronesians against the discriminatory liquor policy of former years. The public sale of beer was permitted in that year, and a year later distilled beverages were also sold (Mahoney 1973:12).

The liberalization of liquor laws, as it happened, occurred at the beginning of a period of intense social change in Micronesia. After years of slow-paced development, the US reversed direction and greatly increased funding for the islands, a move that led to more and higher paying jobs for Micronesians, a much larger disposal income for the average islander, and growing concentration of the population in the district centers. In other words, there was more money with which to purchase beer and liquor and more people in town to enjoy these pleasures (Hezel 1981:4).

The predictable consequence of all this was a fair amount of drunkenness and mayhem. Young men, the main consumers of alcohol, would often gather in small groups in the bush or in bars to spend much of the weekend in marathon drinking bouts. In nearly all the towns in Micronesia biweekly payday weekends became a dreaded event, as young men raced

around the roads in crowded pickups or whooped and cursed as they staggered home, challenging all passersby. Not all drinking ended in brawling and belligerence, but intemperate use of alcohol was generally regarded as the greatest single curse in Micronesia. Police statistics showed time and again that over 90 percent of all arrests were related to alcohol: "for illegal possession and consumption of alcohol; or while under the influence of alcohol disturbing the peace, assault and battery, and vandalism; and burglary and larceny to get alcohol or money to purchase alcoholic beverages" (TTPI 1976:24-5).

Meanwhile, community groups and political authorities made one attempt after another to stem the flood of alcohol and check the anti-social behavior it was causing. Drinking permits were issued in some of states in an effort to control sales, bars were closed and only package stores were allowed to sell alcohol, higher taxes were imposed, and municipalities voted to go dry in desperation. The best known example of the new prohibition occurred in Chuuk in January 1978, when Weno, the government center and capital of Chuuk, passed a law forbidding the sale and consumption of all alcoholic beverages.

Cultural Background

Alcohol is almost never drunk alone in Micronesia. Drinking is a social activity, one that has taken on cultural meanings and is performed in certain cultural contexts.

Alcohol use throughout Micronesia has long been identified as an activity in which principally, though not exclusively, young males engage. In a Chuukese village he studied in 1976, Marshall (1979:67) found that drinking was nearly universal among the young men living there: 50 of the 57 males between the ages of 18-35 drank at least occasionally. As many anthropologists who have worked in Micronesia have observed, young people were traditionally granted an extended period of "play time," a time of freedom and experimentation that lasted until their thirties. This period of lengthened adolescence was permitted to the young while they were still apprentices and did not yet enjoy "decision-making responsibilities either at home or in the community" (Mahoney 1973:6).

As much as parents and older members of the community may counsel against drinking and bemoan its disruptive effects in the home and village, they fully expect that young men will drink regardless, since they see drinking as an almost inevitable part of growing up. It is widely regarded as something of a rite of passage into adulthood. Like youthful love affairs, drinking is seen as a necessary evil concomitant with the long period of freedom and self-expression that constitute Micronesian "adolescence" (Hezel 1981:9). Abandonment to the pleasures of drinking slips easily into the cultural niche that Micronesian societies had long ago carved out for the young before they were expected to behave as mature adults.

Mahoney noted that in an earlier age males in that age category would have been young warriors. Marshall argues, in the same vein, that drunk young Chuukese males are even today "weekend warriors" who substitute for more traditional battle the adventure of the romping through town on the lookout for trouble. One need not accept this paradigm totally to appreciate that the use of alcohol by youth in Micronesian societies serves very real functions, whatever social damage it may cause at times.

First, it provides youth with the opportunity to express themselves much more freely despite the restrictions on self-expression that the cultures impose on all persons, especially the young. Young males who have been drinking frequently give vent to emotions that it would not otherwise be proper for them to express. Most young Micronesians, if asked, would put it another way; they would say that drinking "gives them the courage" to do or say things that they could not do or say if sober. This self-expression may take different forms: making a complaint against older family member, talking freely with an attractive girl they have been watching shyly from a distance, or even provoking a fight with someone against whom they have held a long grudge.

Second, drinking gains recognition for young people, who are ordinarily relegated to the back of the meeting house, given menial tasks to perform at public functions, and told by and large to keep out of the way and say as little as possible. Micronesian cultures, with the premium they place on age, do not afford youth a high social status. On the one hand, as we have seen, their mischief is lightly dismissed as what may be expected from the young; but, on the other hand, relatively little attention is paid to their desires or opinions (Hezel 1981:17-18). A son returning home drunk will be the center of attention in his family at least for a few hours, and perhaps even pampered by them until he sleeps off the alcohol.

Third, drinking is an escape from routine and a brief exciting interlude in what could otherwise be a rather monotonous life. Drinking is seen as something of an adventure, especially when it is done on the sly and against the express wishes of family and community. The thrill is compounded by the element of risk that surrounds many drinking escapades; one never knows when the party will erupt into violence or end with the arrest of all the revelers.

One of the most important points to be noted about alcohol use in Micronesia is that the act of drinking redefines the person culturally; the drinker now stands in a special category and is no longer regarded as entirely accountable for his acts. To sit with an open can of beer in front of one is to declare a "cultural time-out." It affords a young man (or an old one) freedom from some of the cloying cultural demands that shape one's life in a small island society. In this view, alcohol use is not so much a symptom of personal maladjustment or social malaise as it is a strategy employed by young people for obtaining the freedom and the hearing that they might otherwise not get.

As Marshall puts it in *Weekend Warriors*:

To become drunk in Truk is to put on a culturally sanctioned mask of temporary insanity. While insane/drunken one can express physical and verbal aggression that would bring strong disapproval were one normal/sober... Trukese believe that when one ingests an alcoholic beverage in whatever amount and of whatever sort, he is drunk and no longer entirely responsible for his words or deeds. Consumption of alcohol allows for an altered state of conscience in which one can get away with behaviors not normally permitted. (Marshall 1979: 53)

In this work Marshall develops the notion of a "cultural time out"-ie, a temporary exemption from the strong cultural demands for conformity-which he borrows from MacAndrew and Edgerton (1969). This notion requires modification, however, since Micronesians are not given entirely free scope to do and say whatever they wish to whomever they wish, at least not without risking unpleasant consequences.

Marshall (1979:134) also notes that the belief that most alcohol abusers are unemployed high school dropouts is a myth. Many are, in fact, wage-earners. Marshall finds no difference between employed and unemployed with respect to frequency of drinking, incidence of problem drinking, and the aftermath of the drinking.

All this is not intended to suggest that older Micronesian adults never engage in drinking. Drinking patterns, however, seem to change substantially as the person moves into his 30s. In Chuuk and Kosrae it is expected that young men will decrease the frequency and amount they drink as they make their transition into adulthood and eventually stop altogether. In Pohnpei adults usually seem to give up drinking alcohol in favor of Pohnpeian sakau, although they may have a beer or two after an evening of sakau drinking. In Yap there appears to be a larger number of youth who continue drinking well into adulthood, even into relatively old age. What we might call "adult drinking"-as distinguished from youth drinking-is a phenomenon that has never received the attention it deserves.

Social Indicators

Amount Spent on Alcohol

Table 2.1: Alcohol Imports (Wholesale \$ Value)

Year	Yap	Chuuk	Pohnpei	Kosrae	Total FSM
1972	135,331	1270,083	74,804	N/A ^a	480,218
1977	431,886	343,282 ^b	262,282	N/A ^a	1,037,450
1984	584,308	315,010	957,356	178,888	2,035,582
1985	538,293	627,097	807,578	215,390	2,188,358
1986	571,898	384,401	791,666	220,057	2,196,802
1987	563,232	582,584	688,136	185,953	2,019,905
1988	626,488	782,838	2,767,637	244,964	4,221,919
1989	638,946	844,088	1,048,440	243,321	2,774,715
1990	961,836	912,463	1,735,374	299,112	3,908,785
1991	788,453	994,086	1,296,711	294,519	3,373,769
1992	768,433	717,960	1,330,528	448,831	3,265,752
1993	783,261	538,722	1,078,473	327,848	2,674,305
1994	706,887	242,801	1,420,675	204,484	2,574,847

Notes: ^a Kosrae data included with Pohnpei for 1972 & 1977.

^b The 1977 figure for Chuuk is given as \$441,605 from Millay (1987:175).

Sources: 1972 data taken from Mahoney (1973:19); 1977 figures from TT Bulletin of Statistics, 1:2 (1978:18); later figures from FSM Trade Bulletin Nos. 1-8.

Table 2.1 presents figures showing the official government figures for expenditures on imported alcoholic products. These figures, however, include only those distilled and fermented beverages that were registered with the customs office, not alcoholic beverages brought in for private consumption or those that were never routed through customs officials. Moreover, these figures take no account of fermented yeast and *tuba*, which are commonly drunk in some islands, especially in Chuuk and the outer islands of Yap.

As Table 2.1 shows, between 1972 and 1977 expenditures on alcohol doubled, from \$480,000 to over \$1,000,000. By 1984 the value of imported alcoholic beverages doubled again, to \$2,035,000-although no adjustments for inflation have been made in these figures. Thereafter, the import value of alcohol in FSM has generally remained at a plateau of between \$2 million and \$4 million a year. The average import value during this period was \$2,837,000 per year. Any dollar increase during the years between 1984 and 1994 was in effect nullified because of the 47 percent rise in the FSM inflation index over the same period.

During the early 1970s, alcohol accounted for 7 percent of the total private sector imports in Micronesia. By the mid-1980s it had dropped to just above 6 percent of all such imports, and ten years later it had fallen to about 2.5 percent. If these government figures are reliable, it appears that the increase in alcohol use has not only tapered off but possibly even fallen during the last decade.

Table 2. 2: Per Capita Yearly Expenditures on Alcohol (US\$)

Year	Yap	Chuuk	Pohnpei	Kosrae
1972	18.188	98	4.38	N/A
1977	55.619	47	11.64	N/A
1984	46.077	46	36.14	28.64
1985	57.421	46	28.17	33.52
1986	59.398	64	27.08	33.31
1987	55.551	77	23.11	27.83
1988	60.741	67	91.17	36.24
1989	60.911	63	33.9	35.6
1990	90.171	64	55.13	43.16
1991	72.721	87	40.47	41.91
1992	69.741	04	40.81	63.01
1993	69.971	32	32.52	37.93
1994	63.244	55	42.17	27.95

Alcohol consumption rates vary widely from state to state, as Table 2.2 indicates. This table shows the yearly per capita expenditures on alcoholic beverages for each state. It should be borne in mind, however, that since Tables 2.1 & 2.2 are based on wholesale import costs, the retail value of the alcohol consumed—the sum that people actually spend on imported alcohol—would run at least 50% higher than the figures given here.

Yap, one of the least populous states, has always shown a much higher average consumption than any other part of FSM despite the fact that almost 40 percent of its people live in the remote outer islands where imported alcohol is largely unavailable. Yap's yearly per capita expenditure on alcohol in 1972 and 1977, the only two years during the 70s for which we have figures, was several times higher than either Chuuk's or Pohnpei's (there are no figures for Kosrae since it was still administered as a part of Pohnpei at that time). Yap's figures showed no appreciable increase during the most recent ten years. In 1994 its per capita expenditures on alcohol (\$63) were still over twice Kosrae's (\$28) and half again higher than Pohnpei's (\$42); the Yap figure was many times higher than Chuuk's, although the government figure for the latter is probably under-reported.

Kosrae shows a rather high per capita expenditure in view of the fact that it is a strongly Protestant island with rigorous beliefs about the evils of drinking. Even so, its annual per capita figures for several recent years are higher than that of Pohnpei, the FSM capital and an island regarded as much more cosmopolitan than Kosrae because of its mixed population and high percentage of non-Micronesians.

Chuuk shows the lowest figures of all the states in per capita expenditures on alcohol; its figures between 1984 and 1994 are roughly half of Pohnpei's and Kosrae's. Since 1978, most of the municipalities in Chuuk, including the main island of Weno, have been legally "dry." Although the law permits the importation of alcohol into the state, one may drink legally only in one or two small islands in the state. Yet, even before the prohibition measure was passed in 1978, drinking was not regarded as acceptable from either a cultural or religious point of view. Although the churches in Chuuk were not as vehemently anti-alcohol as the church in Kosrae, drinking was generally regarded as an activity that, even if not necessarily evil in itself, often had lamentable effects. Alcohol use has never been incorporated into community or family celebrations in Chuuk as it has in Yap and Pohnpei.

Per Capita Consumption of Alcohol

Information on quantity of alcohol imports is not publicized in FSM. The only information we have on yearly imports must be calculated from tax revenue records. Since we know the revenue generated from import taxes on beer, wine and spirits and the tax rates on each type of beverage, we can infer the amount of each type of alcohol imported that year.

Based on these calculations, the annual per capita consumption in liters of absolute alcohol for 1974 was

Yap	4.4
Chuuk	1.8
Pohnpei & Kosrae	1.5

Per capita consumption in 1974 for all parts of what would later become FSM was 2.0 liters of pure alcohol.

We may compare this with figures for 1992, based on similar calculations by Marshall (FSM&WHO 1993:Table 13). The per capita consumption in FSM during that year was 70 bottles of beer, seven one-and-a-half oz shots of whiskey, and 3 oz of wine (about half an ordinary wine glass). This translates to 1.4 liters of pure alcohol for every man, woman and child in FSM. It should be noted that the 1992 per capita consumption figure shows a significant drop from the 1974 figure.

The per capita figures for the states differ greatly from one place to another, with some showing a considerable increase or decrease from the 1974 figures cited above. The breakdown of 1992 per capita consumption by states is:

Yap	5.3
Kosrae	2.5
Pohnpei	1.2
Chuuk	0.5

By way of comparison, the per capita consumption during 1983 in Palau was 5.7; Japan's was 6.2, New Zealand's 8.2, and Australia's 9.7 (WHO 1987:2). Other figures can be derived for some of the Pacific Island nations, although they are for more recent years and are based on beer consumption only. Fiji's per capita beer consumption for 1982 was recorded at

1.5; American Samoa's for 1983 was 4.0; and Tonga's for 1991 was 1.5 (FSM&WHO 1993:27).

Alcohol-Related Deaths

Common causes of death by illness usually associated with alcohol abuse include cirrhosis, gastritis and hepatitis. In addition, many motor vehicle accidents and other kinds of accidental deaths, as well as homicides and suicides can be attributed to alcohol use.

Table 2.3 shows the number of alcohol-related deaths for each state in the FSM during the years 1991-1995, as recorded in hospital death certificates. The number of such deaths has increased in Pohnpei and Kosrae as well as for FSM as a whole. During this five-year period, the percentage of alcohol-related deaths over all deaths in FSM has risen from 3.5 percent to 5.9 percent, as Table 2.3 shows.

Table 2.3: Alcohol-Related Deaths, 1991-1995

Cause of Death	1991	1992	1993	1994	1995
Pohnpei:					
Cirrhosis	3	4	4	2	2
Homicide	0	2	1	2	2
Suicide	0	4	4	5	7
Gastritis	0	0	0	1	1
Total	3	10	9	10	12
Kosrae:					
Suicide	1	1	0	0	1
Hepatitis	0	0	1	0	0
Drowning	0	0	0	1	0
MVA	0	0	0	1	0
Liver disease	0	0	0	0	1
Total	1	1	1	2	2
Yap:					
Cirrhosis					
	1	0	0	0	1
Homicide					
	1	0	0	0	1
Suicide					
	1	0	6	1	0
Gastritis					
	0	0	0	1	0
MVA					
	1	0	2	0	0
Drowning					
	0	0	0	1	1
Total	4	0	8	3	3
Chuuk:					
Suicide					
	4	5	4	1	5
Homicide					
	2	1	1	5	1
Drowning					
	1	1	0	0	0
Hepatitis					
	0	1	1	0	2
Total	7	8	6	6	8
FSM TOTAL					
	15	19	24	21	25
as % of all deaths	3.5%	4.7%	4.9%	4.3%	5.9%

Hospital Admissions

No reliable information could be obtained on the number of hospital admissions for alcohol-related injuries or illnesses.

Such information as was available seemed incomplete, with some states reporting mainly on motor vehicle accidents that occurred when the driver was intoxicated and others on alcohol-induced psychosis or drug dependency. The figures that can be obtained for Yap, Kosrae and Pohnpei indicate that about one percent of the total hospital admissions in 1995 were for conditions directly attributable to alcohol or other drugs. The hospital records on Pohnpei show that 0.8% of all admissions in that year were alcohol-related. Yap had a 0.9% rate, and Kosrae a rate of 1.7%.

Suicides

Since the early 1970s suicide has been a serious problem in FSM, claiming over 30 lives annually in recent years. The high suicide rate in FSM over the past 20 years has often been attributed to the drunken state that the young man is in when he takes his life. The author of this report, who has researched suicide for 20 over years and has an extensive data-base with records of nearly all victims since 1965, has discovered that nearly half of the suicides occur when the victim is inebriated (Hezel 1989:45).

Table 2.4 shows the ratio of suicides in which the victim had been drinking before his death to the total number of suicides for the year. The table shows data for the years 1991-1996, state by state. For FSM as a whole during this six-year period, 81 of 182 suicides occurred when the victim was intoxicated. Thus, 45% of all suicides were occasioned by alcohol use.

Table 2.4: Alcohol-Related Suicides, 1991-1996

State	1991	1992	1993	1994	1995	1996
Pohnpei	3 / 7	1 / 4	4 / 6	4 / 7	6 / 11	3 / 7
Kosrae	1 / 2	1 / 1	1 / 1	0 / 0	1 / 1	0 / 0
Chuuk	11 / 20	13 / 23	6 / 12	0 / 8	8 / 21	11 / 26
Yap	1 / 4	0 / 1	3 / 11	0 / 1	2 / 5	1 / 3
Total FSM	16	33	15	29	14	30
	16	3315	2914	304	1617	3815

Source: Micronesian Seminar suicide database

Arrests for Alcohol-related Crimes

Everywhere in FSM alcohol-related crimes account for the vast majority of arrests. For twenty years official reports have estimated that 90% of all arrests were connected to alcohol: either because they were committed by persons while intoxicated (as in most cases of aggravated assault, homicide, disorderly conduct, DUI, etc) or because they were motivated by the desire to obtain money for drinking (as with many the crimes of theft, breaking and entering, and larceny).

Arrest data for recent years obtained from the state departments of public safety are incomplete and cannot easily be tabulated for comparison between states. Nonetheless, Table 2.5 shows the number of arrests for alcohol-related crimes in each state for various years throughout the past six-year period.

Table 2.5: Alcohol-Related Arrests

State	1991	1992	1993	1994	1995	1996
Pohnpei					443	
Kosrae				685		
Yap					180*	
					1,856	
Chuuk						1,623
	2,367	2,256	2,138			
	212	286	311	391	375	

Note: Kosrae data is from August 1995 to July 1996

Only Yap and Kosrae provided the data on total number of arrests necessary to determine the relative role that alcohol plays in crime. Kosrae's records for August 1995-July 1996 indicate that 82% of the arrests (180/220) were alcohol-related.

The statistics for Yap during the five-year period 1991-1995 show a comparable percentage of alcohol-related crimes: 73% in 1991, 82% in 1992, 80% in 1993, 85% in 1994, and 87% in 1995. While the growing percentage of crimes in Yap attributed to alcohol may be significant, it may just be a function of the improved record-keeping that has been occasioned by requirements for US federal funds targeted at substance abuse control.

There is no doubt that alcohol contributes greatly to the crime rate in every part of the FSM. If the figures cited here are an accurate measure of that contribution, 80%-85% of the arrests are for crimes that were committed by persons under the influence of alcohol-or other drugs, in a small percentage of these cases. Although the frequently quoted axiom that alcohol is responsible for 90% of the criminal acts in Micronesia may be slightly overstated, it is certainly not much of an exaggeration, especially when allowance is made for the motivation of thefts that may not be officially connected to alcohol.

The only state for which we have data on juvenile arrests is Yap. The figures for 1995 in Yap show 61 arrests of juveniles (under 18 years of age) during the year, but the offenses were so minor that 55 of these could be handled outside the court system. They included illegal consumption of alcoholic beverages (24), curfew violation (4), and disturbing the peace (15).

We have little information on the jail population in the states other than for Yap. Of the 16 men who constituted the prison population in mid-October 1996, ten are reported to have been jailed for crimes committed when they were under the influence of alcohol. These prisoners were charged for crimes such as sexual assault, homicide, and assault with a deadly weapon. We may assume that the profile of the prison population in Yap is not dissimilar to what can be found in other states.

Survey Data on Alcohol

General Prevalence Rate by Sex

The 12-month prevalence rate of alcohol use in the FSM is 32%, as indicated in Table 2.6. Because of the wide variance from state to state and an even greater difference along the sex divide, this general prevalence rate itself is of limited usefulness.

The survey data reveals, unsurprisingly, a marked difference in the use of alcohol by sex. As we have noted in the section on cultural background, drinking has always been regarded as a predominantly activity, and in some places exclusively so. The rate of alcohol use among males is six times as great as the rate among females. About 55% of all males over the age of 15 drink alcoholic beverages, while only 9% of the women above this age drink. While confirming the observation that drinking is generally a male prerogative, the data also indicate the degree to which Micronesia is beginning to depart from that norm as women start taking to drink.

The comparative rate differs from one state to another. The male prevalence rates in Yap (63%) and Pohnpei (61%) are considerably higher than in Kosrae (35%), where alcohol use is strongly discouraged by the church. Chuuk's male prevalence rate of 50% stands midway between Kosrae and the other two states.

Female rates in the states vary much more widely than male. In Kosrae and Chuuk, where the male rates are comparatively low, the female rates of 1% are the lowest in FSM. The ratio of male to female drinkers in Kosrae is 29:1, while in Chuuk it is 46:1. The low female rates of alcohol use in these two places are indicative of the strong cultural prohibition on female drinking that persists even today. In Yap, on the other hand, where the gap between the prevalence rate of males and females is lowest, at 63% and 27% respectively, the ratio of male to female drinkers is only 2.4:1. Pohnpei, with a female rate of 14%, holds a middle position; the male rate is a little over four times the female rate.

Table 2.6: Users of Alcohol Within Past 12 Months (15 + yrs):General Characteristics (Number and percentage of sample)

	Males		Females		Total	
	N	%	N	%	N	%
FSM	1223	54.9	195	9.1	1418	32.4
Pohnpei	477	61.4	108	14.4	585	38.2
Kosrae	52	34.9	2	1.2	54	17.3
Chuuk	520	50.5	10	1.1	530	27.0
Yap	174	63.1	75	26.7	249	44.6
Marital Status						
single	490	47.9	62	7.3	552	29.6
married	694	62.9	119	10.8	813	36.9
divorced	26	70.3	8	17.8	34	41.5
widowed	11	28.9	6	4.9	17	10.5
Employment Status						
salary job	512	70.0	56	18.6	568	55.0
unemployed	710	48.6	139	7.8	849	26.0
student	95	29.2	10	2.8	105	15.3
Ethnicity						
Micronesian	1213	54.9	190	9.0	1403	32.4
Asian	2	37.5	1	20.0	3	37.5
US/Australian	6	60.0	4	50.0	10	55.5
Other Pacific	2	66.6	0	0	2	66.6
Residence						
town	187	48.1	46	11.2	233	29.2
village	759	55.3	99	7.8	858	32.5
outer-islands	208	53.1	46	11.8	255	32.3

Comparison with Past Studies

The prevalence rates computed from this survey are not out of line with earlier studies of young Micronesian drinkers. In a survey of 275 students at the three campuses of the College of Micronesia, Jeanne Edman (1980) found that over 70% of the males and 12% of all females used alcohol at least occasionally. Employing a convenience sample and written

questionnaire methodology, she reported a rate for Pohnpei students that is consistent with the findings of this survey. Her figures-72% for males and 23% for females-are comparable with the prevalence rates found among the 20-29 age cohort for Pohnpei in this survey: 73% for males and 15% for females.

In a 1985 survey of the general population of Chuuk (sample size=1000), Mac Marshall found a prevalence rate of 43% for males and 0.6% for females (Marshall 1991:339). This compares favorably with the rates discovered for Chuukese aged 15 and over in this survey: 50% for males and 1% for females.

The alcohol use data from the "Behavioral Risk Factor Assessment among Youth of the FSM,"

A written questionnaire answered by over 6,000 school children aged 12-18, or one-third of all in this age group, is difficult to use for comparative purposes. The age-grouping does not coincide with most groupings, including those used in this survey, and the results are not broken down by sex. The total 30-day prevalence rate for those in the 12-18 age cohort is given as 35% (Reed 1993). This seems to be unusually high, especially for an age group where the rate of alcohol use was found to be rather low in this present survey; the Pohnpei rate for the entire 10-19 age cohort was only 15%. As we shall see in a later chapter, figures from the same survey on other types of drug use also seem inflated.

General characteristics

Age. Everywhere in FSM prevalence rates for alcohol correlate strongly with age as well as with sex. Table 2 indicates that the highest rate for each of the states is found in the 30-44 age group. The rates in this group are even higher than the rates for the 20-29 cohort in all states, the period in which drinking is generally thought to pose the greatest social problem. While one might have expected that young drinkers would have begun to slow down in their 30s and early 40s, the survey indicates that male drinking peaks during the 30s, a period of young adulthood that still offers males the freedom to associate with their peers and carry on adolescence-like activities. Drinking rates fall significantly in later adulthood, as reflected in the drop among those in the 45-64 age group in all states but Yap.

The onset of drinking varies considerably by state, as Table 2.7 shows. Pohnpei data reveal a small number (4.3%) beginning to drink during their early teens (10-14), with a much larger percentage (27.6%) than the national average drinking during their late teens (15-19). Chuuk has a very small number drinking in their early teens, which grows into a rate (15%) half the size of Pohnpei's by the late teens. Yap and Kosrae figures do not show any evidence of drinking in the 10-14 age group, and Kosrae shows none in the 15-19 age cohort. Yap's rate in the late teens, however, is already substantial, with one out of every six in this age group using alcohol.

Table 2.7: Users of Alcohol Within Past 12 Months by Age Group(Percentage of sample)

	<10	10-14	15-19	20-29	30-44	45-64	65+	Total	15 +
FSM									
Males	0	2.6	32.4	63.0	69.5	50.7	21.8	54.9	
Females	0	0.8	5.5	8.1	14.6	7.6	4.4	9.1	
Total	0	1.8	19.0	36.7	43.0	28.7	13.6	32.4	
Pohnpei									
Males	0	6.4	44.4	73.4	76.1	48.6	18.4	61.4	
Females	0	2.1	9.9	14.6	20.5	12.5	2.6	14.4	
Total	0	4.3	27.6	46.0	47.3	30.5	10.4	38.3	
Kosrae									
Males	0	0	0	37.0	54.5	42.3	7.1	35.1	
Females	0	0	0	0	3.0	3.8	0	1.2	
Total	0	0	0	16.2	32.5	23.1	4.5	17.6	
Chuuk									
Males	0	1.7	27.9	56.6	65.6	45.4	22.2	50.5	
Females	0	0	1.1	1.1	2.0	0	0	1.1	
Total	0	0.9	14.9	30.9	36.8	21.6	11.9	27.0	
Yap									
Males	0	0	22.2	75.3	75.9	75.9	46.2	63.1	
Females	0	0	11.1	23.3	36.8	34.1	25.0	26.7	
Total	0	0	16.7	47.8	55.5	54.5	36.0	44.6	

Although alcohol use declines in the later age groups, this decline too varies considerably from state to state. Chuuk, Kosrae and Pohnpei show a drop in prevalence rate for the 45-64 age group and an even sharper fall off among those over the age of 65. On the other hand, Yap's rate remains remarkably high in the 45-64 age group, almost as high as for the 30-44 age group, and the decline in drinking among those over 65 is more modest than for the other states.

Marital status. Marital status does not correlate well with alcohol use, as Table 2.6 indicates. The prevalence rate for single persons (30%) is lower than the rate for those who are married (37%), but even this weak correlation shows little substance when examined more closely. When a comparison is made of marital status within a more circumscribed age group (20-44), there is very little difference in the rates, as is illustrated on Table 2.8. The rates of alcohol use among the married and unmarried are so close for Yap and Pohnpei as to be virtually indistinguishable. Chuuk and Kosrae show a slightly higher rate of alcohol use among the married, but the difference does not appear to be significant. For Micronesians marriage is not as significant a milestone in life, indicating that one is ready to "settle down" and act responsibly, as it seems to be for Americans.

**Table 2.8: Current Users of Alcohol (aged 20-44) by Marital Status
(Percentage of sample)**

	Males		Females		Total	
	N	%	N	%	N	%
FSM						
single	338	59.2	37	9.2	375	38.5
married	507	72.6	95	12.3	602	41.2
Pohnpei						
single	111	75.5	19	17.9	130	51.4
married	216	76.6	55	18.0	271	46.1
Kosrae						
single	15	36.6	0	0	15	19.5
married	25	53.2	1	1.8	26	25.2
Chuuk						
single	176	52.7	4	1.8	180	32.4
married	194	70.8	4	1.4	198	35.7
Yap						
single	36	73.5	14	35.0	50	56.2
married	72	75.8	35	30.7	107	51.2

Employment. The figures on employment status in Table 2.6 show a rate for those with salary employment (55%) that is double the rate of the unemployed (26%). It is difficult to explain this difference except insofar as salaried employees have access to the money with which to purchase alcoholic beverages.

Educational status. The low rate of alcohol use for students (15%) is due in part to their relatively young age; most have not yet reached the age groups in which the highest levels of drinking occur. Nonetheless, a strong correlation between alcohol use and educational status is to be found in the data, as may be seen in Table 2.9. When the age is narrowed to the 10-19 group, the difference in rate of alcohol use between in-school and out-of-school youth is striking. The prevalence rate among those not in school is many times higher than for students—three times higher on Pohnpei, five times higher in Chuuk, and ten times higher in Yap.

Table 2.9: Current Users of Alcohol (aged 10-19) by Educational Status

	Males		Females		Total	
	N	%	N	%	N	%
FSM						
in-school	55	10.6	11	2.1	66	6.3
out of school	100	42.7	16	9.6	116	28.9
Pohnpei						
in-school	29	18.8	7	4.3	36	11.3
out of school	56	56.0	12	13.8	68	36.4
Kosrae						
in-school	0	0	0	0	0	0
out of school	0	0	0	0	0	0
Chuuk						
in-school	21	8.4	1	0.4	22	4.3
out of school	37	31.1	1	1.5	38	20.3
Yap						
in-school	5	4.4	3	2.9	8	3.7
out of school	7	46.7	3	25.0	10	37.0

Ethnicity. The ethnicity figures for non-Micronesian groups are too small to admit of meaningful comparison with Micronesians. A mere handful of Asians, Americans, and other Pacific islanders showed up in the survey data.

When the state populations are broken down along ethnic lines, few strong differences seem to emerge from the survey data. In Pohnpei, Ngatikese (38%) and Kosraeans (32%) have higher alcohol rates than ethnic Pohnpeians (27%), but Mokilese (19%) have the lowest rate of any major ethnic group. In Yap, ethnic Yapese and Outer Islanders, who possess very different cultural traditions, show only a negligible difference in alcohol use rates for those 15 and above; the former had a rate of 25% and the latter a rate of 28%.

Residence. Residence, too, seems to have little effect in establishing drinking behavior, as the figures on residence in Table 2.6 suggest. Town dwellers, who have access to retail stores, wage employment and a modern lifestyle, were found to have a prevalence rate of 29%. Despite their relatively advanced status on the continuum of westernization, they show a slightly lower rate of alcohol use than those who live in the less developed rural villages (33%) or in the far more traditional remote coral atolls (32%). This finding may be a surprise for those who regard alcohol abuse as one of the legacies of modernization, or at least as an accurate yardstick with which to measure the degree of westernization in a society.

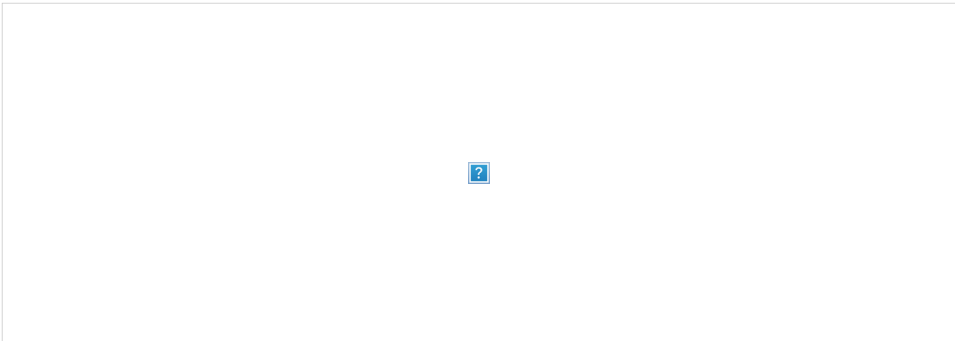
In Yap State, the community with the highest (birth to death) prevalence rate (31%) is Falalop, an island in Ulithi Atoll, while Mogmog, another island in the same atoll, has a rate (24%) that is comparable to any on the main island of Yap. In Kosrae the highest rate (20%) was recorded in Malem, one of the outlying villages, while the more central communities of Lelu and Utwa showed much lower rates of alcohol use: 7% and 13% respectively. In Chuuk the two outer islands surveyed show very different rates: Nama had one of the highest rates of any community in Chuuk (26%), while Nomwin had one of the lowest (12%). In Pohnpei, two rural communities close to one another provided an especially striking contrast with respect to drinking. One of them, Saladak, had the highest rate on Pohnpei at 33%; the other, Mesihisou, registered the lowest by far at 8%.

Breakdown by states

Pohnpei. As in all the states, the male prevalence is much higher than the female rate, with over four times as many males using alcohol as females. The percentage of males drinking in the peak years of alcohol use (20-44) is comparable with the rates in Yap for these same age groups and much higher than in the other two states. Roughly three-quarters of all males between the ages of 20 and 44 drink, and about one of every five women in the same age group uses alcohol. The survey indicates a younger onset of drinking in Pohnpei than in other states; a few begin in their early teens and a considerable number take up drinking in their later teens—almost half of the males in the 15-19 age cohort are using alcohol. As significant as the drop in the percentage of those drinking in the later age groups is the fall in average consumption, as we shall see later in this chapter. Older Pohnpeian drinkers seem to prefer *sakau*, the traditional island beverage, capping an evening of *sakau* drinking with one or two beer chasers. Those who continue to use alcohol in their later years seem to move from binge drinking to a more moderate style of social drinking.

Kosrae. Female drinking is very rare, as the survey figures indicate. Only one of every 30 drinkers in the state is a woman. Male drinking is less common than in other states; the male rate for the peak age group (30-44) is a little over 50%. In addition, drinking begins later than in other states (there is not a single instance of teenage drinking in the

survey data) and is concentrated between the ages of 20 and 64, with rates falling off sharply after 65. In Kosrae, however, there is no replacement drug for alcohol such as *sakau* on Pohnpei. The data confirm the widely held view of Kosrae as a controlled society, notwithstanding the fact that half of the males drink during their early adult years.



Chuuk. As in Kosrae, women rarely drink in Chuuk. They account for only one drinker in 47, the survey indicates. The prevalence rate among Chuukese males grows steadily through the 20s, reaching its apex during the 30-44 age group when two-thirds of the men use alcohol with some regularity. Although the rates fall sharply afterwards, it is significant that nearly half (45%) of the males continue to drink in the 45-64 age range. Alcohol use is no longer merely the amusement for the young that it was once considered to be, but is becoming an activity in which older adults enthusiastically take part. The data on consumption and frequency, as we shall see, suggest that Chuukese males drink more often and greater quantities of alcohol in their earlier years than their counterparts in other states, but slow down considerably or stop drinking later in life.

Yap. Female drinking is much more common than it is in other states; almost 30% of all those using alcohol in Yap are women. The female prevalence rate in Yap for those aged 15+ is nearly double the female rate in Pohnpei, the state with the next highest female drinking rate. The prevalence rate for the 10-14 age cohort was nil and that for the 15-19 age group (17%), although relatively high by comparison with the same age group in other states, is low when set alongside the Yap rates for the following age cohorts. To judge from the survey figures, Yapese seem to delay drinking until the late teens or early 20s, but once they start they do not stop. Both the male and female rates show a negligible decrease in the 45-64 years, and even after the age of 65 the decline is moderate. Throughout the major part of the adult life span, ages 20-64, the prevalence rate is uniformly high, with three-quarters of the males drinking and about one of every three females.

Frequency and Amount Consumed

The frequency of drinking is generally rather low throughout FSM, as Table 2.10 shows. The great majority of those who use alcohol-61% in Chuuk, 73% in Yap, 76% in Pohnpei, 93% in Kosrae-do so no more than once or twice a week. Only about 11% of the FSM population drink daily. Just one of every three male drinkers and one of every six female drinkers uses alcohol every day or every other day.

Table 2.10: Frequency of Alcohol Use for Current Drinkers
(Percentage, with rows totaling 100%)

	Daily	3-4 times wk	1-2 times wk	1-3 times mo	less than monthly
FSM					
Males	11	21	26	24	18
Females	7	8	23	26	35
Total	11	19	26	24	20
Pohnpei					
Males	15	11	24	28	22
Females	10	4	26	23	37
Total	14	10	24	27	25
Kosrae					
Males	6	2	45	17	30
Females	0	0	0	0	100
Total	5	2	44	16	33
Chuuk					
Males	6	33	27	22	12
Females	0	20	20	60	0
Total	6	33	27	22	12
Yap					
Males	18	15	22	26	20
Females	3	12	20	28	36
Total	13	14	21	27	25

Although the frequency of drinking is moderate by US standards, the reported amount consumed is prodigious. If we take at face value the figures from the survey, the average number of drinks consumed per day of drinking in FSM would be 13. According to the computations from survey data, the average Pohnpeian has 9.3 drinks per sitting, the Kosraean 9.2, the Yapese 11.9, and Chuukese 15.9 (see Table 2.11). One-quarter of all drinkers in Pohnpei and Yap and one-sixth of the drinkers on Kosrae were reported as having 13 or more drinks each drinking session⁽¹⁾.

A large number of young men were said to finish off a case of beer (24 cans) whenever they drank, and several were reported to be able to consume two cases alone. The most astonishing feats were attributed to Yapese men, whose per capita consumption was significantly higher than that of any other state. While these estimates of daily alcohol consumption need not be accepted uncritically, it would be a mistake to dismiss them out of hand as gross exaggerations. While engaged in conducting the survey, the field investigator witnessed a Yapese man finish three cases of beer by himself in the course of a 12-hour drinking bout. This accomplishment entailed the consumption of 72 12-oz cans of beer, the equivalent of almost a quart and a half (43 fluid oz) of pure alcohol.

When we look at the consumption data more closely, we find that it falls into five different patterns:

having a drink or two at a sitting, often as a social gesture or, on Pohnpei, after finishing *sakau* in the evening;
 taking slightly more, perhaps three or four drinks, on a typical day;
 finishing a six-pack of beer in a moderate drinking session;
 drinking about two six-packs, or the equivalent of twelve drinks, often on a minor binge;
 finishing a good part of a case of beer (24 cans), or less frequently a bottle of whiskey (20 drinks), usually as part of an all-day or all-evening session.

Since these categories seem to serve as common benchmarks for consumption in the eyes of Micronesian informants, we have adopted them in our tables as a rough measure of alcohol consumption. While they may serve as reasonably accurate indicators of the relative heaviness of the subject's drinking, the figures on the number of drinks consumed in a day should not be taken too literally. For that reason we have ordinarily used the categories described above rather than the tabulated averages to measure alcohol consumption.

Table 2.11 presents a view of the average alcohol consumption as organized into the patterns discussed above. Kosrae's consumption is more moderate than any of the other states, for nearly 40% finish the equivalent of a six-pack (5-7 drinks) in a typical drinking session. Pohnpei shows a peak (21%) at the same consumption level, but survey figures indicate another, even higher rise (24%) at the 13+ level. The greatest number of Yap drinkers (30%) consume 8-12 drinks in an

outing, thus drinking at one level higher than Kosrae and Pohnpei drinkers. The Chuuk figures show a very high percentage of the drinking population (58%) consuming alcohol at the highest level-13 or more drinks in a day-and a large percentage (24%) having 8-12 drinks a day.

Even when allowances are made for exaggeration, the number of what might be called "binge drinkers"-those who have five or more drinks on a day-represents a high percentage of the total alcohol drinking population in FSM. Over four-fifths of the males and one-half of the females were said to be drinking more than five drinks per sitting and so qualifying as "binge drinkers" by standard US norms. The percentage of "binge" drinkers is even higher among males in Yap (86%) and Kosrae (78%). As might be expected, the percentage begins dropping with increasing age-beginning in the 20s for females and in the 30s for males-and continues falling through the upper age groups.

Table 2.11: Usual Number of Drinks Consumed at a Sitting by Current Alcohol Users(Percentage with rows totaling 100%)

	1-2 3-45-78-1213 +(Avg)					
FSM						
Males	10	8	18	23	39	13
Females	31	17	20	13	15	8
Total	13	9	19	22	36	12
Pohnpei						
Males	24	11	21	19	26	10
Females	48	9	22	9	13	6
Total	28	11	21	19	24	9
Kosrae						
Males	6	15	38	25	15	9
Females	0	50	50	0	0	5
Total	6	17	39	24	15	9
Chuuk						
Males	1	3	13	24	59	16
Females	0	0	20			
				50	30	13
Total	1	30	14	24	58	16
Yap						
Males	2	12	23	35	27	13
Females	16	32	19	16	17	9
Total	6	18	22	30	24	12

Drinking Patterns in States

Some further differences should be noted in the drinking patterns in various states.

Kosrae. When the amount consumed is plotted against frequency of drinking, it is evident that the heaviest drinkers in Kosrae are those few who drink most frequently. The four young men sampled on Kosrae who used alcohol daily or nearly every day were reported as consuming over 15 drinks at a sitting; by contrast, those who indulged in alcohol less regularly reportedly consumed an average of less than 10 drinks at a sitting. This suggests a small segment of very heavy alcohol users, possibly alcoholics, and a larger number of more moderate "social drinkers."

Yap. In Yap, as in Kosrae, average consumption per session varies directly with the frequency of drinking. The average reported consumption for those who drank daily was 21 drinks per session, but that number decreased for those who used alcohol less frequently. Those who drank 3-4 times a week reportedly averaged 16 drinks, those drinking 1-2 times each week had 11 drinks, those taking alcohol 1-3 times a month 10 drinks, and those drinking less than once a month were reported to have 7 drinks per sitting. This pattern seems to hold true for females as well as for males. Overall, the consumption pattern in Yap is similar to that on Kosrae, although Yapese drink much more heavily than Kosraeans. The table plotting frequency against consumption suggests that a significant number of Yapese, male and female-about one-quarter of the drinkers in the survey sample-are engaged in heavy addictive drinking, while many more engage in more moderate and less frequent drinking episodes that would be labeled "binges" by our definition.

One other anomaly for Yap should be noted, even if the supporting data are not shown in tabular form. When the drinking population is broken down by age groups, we find that the average daily consumption in Yap does not drop as sharply for the older age groups as it does in other states. Rather, it remains nearly as high for the 45-64 and 65+ groups (with 28% and 22% respectively in the heaviest daily

consumption range) as for the 30-44 age group (33%). Thus, the drinking population in Yap appears to be drinking almost as much in late middle age and beyond as in youth. This would tend to confirm the suspicion that the incidence of alcoholism in Yap is higher than in other states.

Pohnpei. The correlation between frequency of drinking and amount consumed is not as direct in Pohnpei. The highest per sitting consumption is registered for those who drink 3-4 times a week and those who drink 1-3 times a month. (Check consumption rate for those who drink 3-4 times week—seems to be discrepancies) The heaviest alcohol consumption was found among the younger drinkers, and consumption dropped sharply for the older age cohorts. The data do not reveal the same degree of protracted heavy drinking in Pohnpei that can be found in Yap. What might be called "social drinking"-including the practice of using beer as a chaser after drinking *sakau* in the evening- seems very common, especially in later years.

Table 2.12: Usual Number of Drinks per Day Consumed by Frequency
(Avg. number of drinks)

	Daily	3-4 times wk	1-2 times wk	1-3 times mo	> 1 mo	Total
FSM						
Males	14	15	12	14	10	13
Females	6	15	7	9	5	8
Total	13	15	11	13	9	12
Pohnpei						
Males	9	11	9	13	8	10
Females	5	11	8	9	4	6
Total	8	11	8	13	7	9
Kosrae						
Males	14	20	10	9	9	9
Females	0	0	0	0	0	0
Total	14	20	10	9	9	9
Chuuk						
Males	18	17	15	16	14	16
Females	0	20	9	11	0	13
Total	18	17	15	16	14	16
Yap						
Males	21	16	13	11	9	13
Females	15	16	9	9	6	9
Total	21	16	11	10	8	12

Chuuk. Chuuk shows a higher frequency of drinking than the other states, with 39% of all drinkers consuming alcohol every day or two. Its average consumption per drinking day is also much greater than the other states; nearly 60% of the drinking population consume 13 or more drinks at each drinking session. The drinking is heaviest in the 20-29 and 30-44 age groups, but dips considerably for the next age cohorts. Although a sizeable number of males are still drinking in the older age groups, most of the drinking population seem to be seasonal drinkers, drinking heavily during youth and moderating their intake or stopping altogether as they get older.

Problem Drinkers

Definition. In this survey we have made no attempt to identify alcoholics as such, inasmuch as the diagnostic criteria offered in DSM III-R and DSM IV remain elusive and resistant to quantitative measurement. Clinical alcoholism is notoriously difficult to define, and in the end seems to be confirmable only after lengthy examination of an individual's life history. Instead, for this survey we have attempted to establish behavioral norms to identify "problem drinkers." The criteria for the category that we use to designate "problem drinkers" fall under two headings: 1) quantity and frequency of alcohol use; and 2) behavioral problems associated with drinking.

Under the first heading, we established as a norm for quantity and frequency:

- consumption of five or more drinks twice a month or more often; or
- having two or more drinks nearly every day; or
- going on a binge (defined as a drinking spree lasting more than one day) at some time during the month previous to the survey.

Under the second heading, one of the following conditions must be verified:

- the person must have undergone treatment for alcohol abuse in the past; or
- he must have experienced at least one serious problem (eg, domestic violence, fighting, absenteeism from work or school,

- arrest while drunk) as a consequence of alcohol use; or
- he must be judged by community informants to have a "serious problem" or to be an outright "alcoholic."

One of the conditions under the first heading and one under the second heading had to be verified for a subject to be classified as a "problem drinker." Repeated testing of this algorithm proved that it was a satisfactory device for screening drinkers who appear to be having serious problems with alcohol.

In order to determine how many are at serious risk for clinical alcoholism, we had to screen for young problem drinkers, who may share many of the behavioral problems of over-use with alcoholics but could be going through the protracted young male drinking period almost mandated by Micronesian cultures. To do this, we have identified "possible alcoholics" as all those "problem drinkers" who are 40 years of age and above.

Survey results. Problem drinkers appear to be very numerous in the FSM. More than half of the drinking population surveyed-58% of the males and 27% of the females-fit the description of "problem drinkers," as the term was used in this survey. These percentages appear to be uniform throughout the nation.

Table 2.13: "Problem Drinkers" (15+ yrs)
(Number and percentage of total sample)

	Males		Females		Total	
	N	%	N	%	N	%
Total FSM	793	35.6	55	2.6	848	19.4
Pohnpei	272	35.0	30	4.0	302	19.3
Kosrae	31	20.8	0	0	31	9.9
Chuuk	387	37.6	5	0.5	392	20.0
Yap	103	37.6	20	7.1	123	22.2

As Table 2.13 indicates, over 35% of the entire FSM male population over the age of 15 may be called problem drinkers. Except for Kosrae, with a low male rate of about 21%, the individual states show little variation from this figure. Predictably, the female rate for FSM is very low at less than 3%, with Yap (7%) and Pohnpei (4%) showing the highest rates among the states.

Overall, one of every five people in the general population (15 years and older) is a problem drinker. Table 2.14, which indicates the estimated number of problem drinkers, shows that there are over 11,000 problem drinkers in FSM at present. Almost half of them are in Chuuk, inasmuch as the breakdown of problem drinkers by state follows that of the general population rather closely.

Table 2.14: Estimated Numbers of Drinkers and Problem Drinkers

	Drinkers			Problem Drinkers		
	Male	Female	Total	Male	Female	Total
FSM	16,290	2,525	18,815	10,607	701	11,308
Pohnpei	6,146	1,408	7,554	3,474	371	3,845
Kosrae	797	33	830	480	0	480
Chuuk	7,287	160	7,447	5,437	80	5,517
Yap	2,060	924	2,984	1,216	250	1,466

The quantity of alcohol consumed by those designated as "problem drinkers" in this survey was unusually high, even when measured against the high levels of consumption recorded for the average drinker. The average daily consumption recorded for problem drinkers was 15 drinks at a session, compared with 12 for the average FSM drinker. Frequent binge drinking, usually several times a month, was much more characteristic of the problem drinkers than daily drinking episodes. Only 15% of all problem drinkers drank daily, but they averaged 19 binges a year, or nearly two a month. A person who drank a six-pack a day was seldom designated a problem drinker by informants by virtue of the quantity and frequency of his drinking because he was thought to be able to impose limits on his intake of alcohol, even if these limits exceeded what peoples in other countries might normally regard as an acceptable level of consumption. This was especially the case where no significant behavioral problems were noted in his dealings with his family or community.

Problem drinkers, then, were distinguished from "heavy drinkers" in this survey through the addition of a separate set of criteria, as was noted in the comments on the definition of problem drinkers. In many cases, informants identified problem drinkers as "having a serious drinking problem," and in some instances flatly labeled individuals as "alcoholics." Underlying these judgments, however, was a solid behavioral norm. In virtually every instance, the person designated as a problem drinker was known to have experienced problems

related to his drinking: alcohol-related illness, repeated absenteeism, public fighting when drunk, arrests for offenses committed when intoxicated, domestic violence or other serious family problems. Most of those identified as problem drinkers in the survey had experienced more than one of these problems.

These problem drinkers, whether or not they can be termed alcoholics as such, represent an astonishingly large percentage of the FSM population. They represent the portion of the drinking population who need assistance and they are the potential clientel of alcohol treatment services.

Treatment

Survey data on the number of those who have sought treatment, the type of treatment they tried, and the degree of success they experienced with the treatment is very thin. This is one of the shortcomings of the key informant approach that was used in the present survey. The interview files show treatment information on only 59 persons: 16 from Pohnpei, 12 from Kosrae, 24 from Chuuk and seven from Yap. All of these 59 people are still currently drinking, it should be noted. There are undoubtedly others who were treated successfully for their alcohol problem, but they were not picked up in the survey.

The types of treatment sought were of various types. Four participated in Alcoholics Anonymous meetings while overseas. Ten received treatment in the hospital either in the form of substance abuse counseling or medication. The rest mention involvement in village or family activities (such as vigorous work on the land), participation in youth organizations, or increased involvement in church activities and counseling from church leaders. It may be noteworthy that the largest number (19) mentioned church as the place where they sought help. Church and community organizations are normally where people afflicted with alcohol or drug problems turn for help.

Epilogue: Comparative Measures of Alcohol Consumption

Using the survey data on frequency and alcohol consumption at a sitting, whatever its limitations, we may calculate the per capita yearly consumption in each of the states and total amount of alcohol consumed in a year. Such calculations may also serve as a check on the reliability of the reported data regarding the quantity of alcohol consumed, one of the most questionable parts of the entire survey.

If we accept the survey consumption figures as reported, we find that the annual per capita consumption of pure alcohol falls within reasonable limits. The annual per capita amount of absolute alcohol drunk, as measured in liters, is:>

Yap 4.5
Pohnpei 3.4
Chuuk 4.5
Kosrae 1.0

When compared with the figures for 1974 and 1992 shown on page 19, these figures show decreases in consumption levels for Kosrae and Yap and increases for Chuuk and Pohnpei. The greatest difference is in Chuuk, where the per capita consumption appears to have soared from 0.5 to 4.5 liters. We must remember, however, that the figures for 1974 and 1992 were derived from records giving the quantity of imported alcohol. Such records, even if they accurately reflect the amount of alcohol purchased from abroad, understate the quantity of alcohol consumed since they do not take account of the *tuba*, yeast or other fermented beverages produced locally.

To translate these quantities into a more familiar measure, the average person (child as well as adult) on Pohnpei drinks the equivalent of 190 drinks, or nearly eight cases of beer a year. For Yap and Chuuk the figure is 255 drinks, or ten and a half cases, while for Kosrae it is 57 drinks, or two and a half cases a year. The amount of alcohol consumed yearly in FSM is the equivalent of almost one million cases of beer.

1. In this survey we used the commonly accepted equivalents as our measure for a "drink"-that is, a 12-oz can of beer, a 1.5-oz shot glass of whiskey (with 20 drinks to a fifth of liquor), or a 6-oz glass of wine. Each of these contains approximately 0.6 oz of pure alcohol.

Chapter 3: MARIJUANA

The Cultural Context

History of Marijuana Use

Marijuana was introduced into Micronesia during the late 1960s, most likely by Peace Corps volunteers. The early history of the drug in one of the states is outlined by a local author:

It is said that marijuana was first introduced to Chuuk by a foreigner who resided on Nama Island toward the end of the 1960s. The person is reported to have had in his possession some marijuana seeds which he sowed and which later grew into healthy plants. By the early 1970s there was a small amount of marijuana filtering into Chuuk. The substance was bought in by students from Palau, Yap and Saipan who were attending school in Chuuk. As early as 1973 marijuana seeds were brought in from Saipan by a sailor on one of the cargo ships. They were planted on one of the lagoon islands and grew to be extremely healthy plants. It was not until the late 1970s that marijuana invaded the islands in large quantity. With much improved means of communication and transportation, and the increased number of Chuukese leaving the islands for school, marijuana found new and effective means of entering the area. (Oneism 1991:2)

Smoking marijuana caught on among Chuukese in the middle 1970s when large numbers of college students returned, bringing back the drug to share with their friends (Larson 1987:219). During the late 1970s the habit spread rapidly among young males. By the early 1980s marijuana was being widely grown in Chuuk, as in Yap and Pohnpei. Cultivation of the crop was often a family project, with even older women contributing to the business and demonstrating a surprising knowledge of cultivation techniques. According to a survey of marijuana dealers conducted by Oneisom in 1985, dealers admitted to making about \$100 in an average week. Police files show that during the five years between 1979 and 1984 \$105,000 worth of marijuana was confiscated in police raids. This presumably represented but a small percentage of the total value of the marijuana produced during these years (Oneisom 1991).

In the absence of any specific information about the other states, we may presume that the spread of marijuana use in Yap and Pohnpei followed similar lines. Wood (1991:46) relates that police in Pohnpei seized over 2,000 marijuana plants with a total street value of over \$1 million in a single year (1988). This figure serves to indicate how widespread marijuana use there was at the time. Kosrae seems to have been slow in developing a local marijuana industry, thanks to strong church sanctions against the drug, but marijuana is reportedly now grown for local consumption in one part of the island.

Cultural Background

Marijuana, like other drugs, is used socially in Micronesia. What Larson reported witnessing in Chuuk during the early 1980s would seem to be equally applicable to other states:

Generally marijuana is smoked by groups of young men, about fifteen to twenty years of age, who gather in a secluded place. Though less common, groups of young women may also smoke regularly. A men's house is an ideal smoking place, but normal residences are also used if few people are around. After dark, smokers may sit circled in a yard or along the shore. Little ceremony surrounds the smoking event itself. Those who smoke together are usually relatives or close friends. Smoking may take place at any time of the day or night although most users prefer to smoke shortly after dark, about six o'clock, and finish later in the evening, about nine o'clock. Daytime smoking is usually of shorter duration and lasts no longer than an hour. Once a joint is lit, each smoker inhales deeply and holds the smoke in as long as possible while passing the joint on to the next person. No stigma is attached to anyone who refuses to smoke. Casual conversation may occur, but the passing of the joint commands the attention of those smoking....

The number of joints smoked during any one session varies considerably. One factor determining the number of joints smoked is the reliability of the source of marijuana. If smokers are accustomed to a daily supply of pot, they tend to smoke less in one sitting. If their supply is more sporadic, they tend to smoke whatever they acquire at once. Smokers' life experience is another factor determining the amount of pot smoked. Those who have never smoked outside Truk (Chuuk) tend to smoke more in one sitting and are less likely to save marijuana for the future. This style of smoking reflects Trukese attitudes toward consumption generally. Whether the activity is eating, drinking, smoking, making love, etc., the ideal is that one should continue until the effect is felt as fully as possible. The purpose of eating and drinking (nonintoxicants) is to feel full. The purpose of drinking intoxicants is to get drunk. With marijuana, the more one smokes, the higher one can get. Hence, the goal is to smoke as many joints as possible at one time. (Larson 1987:221-222)

Survey Data on Marijuana

General Prevalence Rate by Sex

The 12-month prevalence rate of marijuana use for the general population of the FSM (15+ years), as seen in Table 3.1, is 8.1%.

A comparison of male and female prevalence rates reveals that marijuana use is even more gender-linked than alcohol use. The rate for FSM males is 15.1%, while the female rate is only 0.8%. The data indicate that marijuana use, which follows the pattern of other drug use in that it was sanctioned for males but not females, does not yet show even the slightly broader gender distribution that alcohol has gained.

Table 3.1: Persons who Smoked Marijuana within Past 12 Months (15 + yrs): General Characteristics
(Number of current users and percentage of sample)

	Males		Females		Total	
	N	%	N	%	N	%
FSM	337	15.1	16	0.8	353	8.1
Pohnpei	118	15.3	13	1.8	131	8.9
Kosrae	23	15.4	0	0	23	7.4
Chuuk	177	17.2	2	0.2	179	9.1
Yap	19	6.9	1	0.4	20	3.6
Marital Status						
single	202	19.8	9	1.1	211	11.3
married	126	11.4	5	0.5	131	6.0
divorced	9	24.3	2	4.4	11	13.4
widowed	0	0	0	0	0	0
Employment Status						
salary job	92	30.6	2	0.3	94	9.1
unemployed	245	16.8	14	0.8	259	8.0
student	37	11.4	3	0.8	40	5.8
Ethnicity						
Micronesian	334	15.1	16	0.8	350	8.1
Asian	0	0	0	0	0	0
US/Australian	0	0	0	0	0	0
Other Pacific	2	6.7	0	0	2	6.7
Residence						
town	50	12.9	9	2.2	59	7.4
village	263	19.2	7	0.6	270	10.2
outer-islands	24	6.1	0	0	24	3.0

**Table 3.2: Persons who Used Marijuana within Past 12 Months by Age Group
(As percentage of sample)**

	<10							Total (15 +)
	10-14	15-19	20-29	30-39	40-49	50-59	60-65+	
FSM								
Males	0	1.9	14.4	22.4	16.8	3.3	1.0	15.1
Females	0	0.3	0.9	1.0	1.0	0	0	0.8
Total	0	1.1	7.7	12.1	9.2	1.6	0.5	8.1
Pohnpei								
Males	0	2.1	11.6	19.2	20.4	7.2	0	15.3
Females	0	0.7	1.2	2.8	2.2	0	0	1.8
Total	0	1.4	6.6	11.6	11.0	3.6	0	8.9
Kosrae								
Males	0	0	0	15.6	32.6	3.8	7.1	15.4
Females	0	0	0	0	0	0	0	0
Total	0	0	0	6.7	18.4	1.9	4.5	7.4
Chuuk								
Males	0	2.9	19.8	27.1	15.6	1.7	0	17.2
Females	0	0	1.1	0	0	0	0	0.2
Total	0	1.6	10.7	14.6	8.6	0.8	0	9.1
Yap								
Males	0	0	9.3	15.4	4.5	0	0	6.9
Females	0	0	0	0	1.1	0	0	0.4
Total	0	0	4.6	7.2	2.7	0	0	3.6

The prevalence rates discovered in this study were lower than the rates reported from previous surveys. In her 1980 survey of Micronesian college students on Pohnpei, Palau and Saipan, Edman (1980) found that 34% of all students interviewed were using marijuana, at least on an occasional basis. Her survey offered no breakdown by sex and no information on quantity or frequency of use.

The survey of FSM school children undertaken by the FSM Substance Abuse and Mental Health Office in 1993 recorded a 30-day prevalence rate of 20% for boys and girls aged 12-18 with no breakdown by sex (Reed 1993). This is much higher than the 7.7% rate that we found for the 15-19 age group in FSM, the closest comparable cohort (see Table 3.2). Even the male 15-19 rate for Chuuk, the state in which the highest rates were found in this survey, is slightly below the figure reported by the 1993 survey.

Marshall's 1985 survey of the Chuuk population shows a current use rate of 26% among males and 0.6% for females over the age of 15 (Marshall 1991:339). The figures for the over-15 Chuuk population in this present survey are considerably lower than Marshall's: 17.2% for males and 0.2% for females.

General Characteristics

Age. Marijuana tends to be a younger man's drug, even more so than alcohol, as Table 3.2 shows in its breakdown of prevalence for different age groups. FSM rates by age form a pyramid with its apex in the 20-29 age group where the general rate rises to 12.1%. According to the survey data, a very small percentage of the 10-14 age group begin using marijuana, but the number of users grows greatly during the late teens and peaks during the 20s. The rate falls off for the 30-44 age group and drops even more sharply for the 45-64 age cohort. All the states show the same pattern except for Kosrae, where marijuana use peaks in the 30-44 age cohort and is generally greater among the older age groups than is the case in other states.

Marital Status. As Table 3.1 indicates, single persons (11%) show a significantly higher percentage of marijuana use than married persons (6%). This may be due to the fact that marijuana use, much more than alcohol use, tends to be concentrated among the young, many of whom are still unmarried. The higher rates among single persons are verified in Table 3.3, which corrects for any age bias by examining only those within the relatively young age range of 20-44. The use rate for the unmarried within this age range is 15%, well above the 8% recorded for married persons. The difference in rates between the single and the married is significant in every state but Kosrae, as Table 3.3 shows.

Table 3.3: Current Users of Marijuana (aged 20-44) by Marital Status
(Percentage of sample)

	Males		Females		Total	
	N	%	N	%	N	%
FSM						
single	138	24.2	5	1.2	143	14.7
married	113	16.2	5	0.7	118	8.1
Pohnpei						
single	36	24.5	5	4.7	41	16.2
married	49	17.4	4	1.3	53	9.0
Kosrae						
single	9	22	0	0	9	11.7
married	11	24	0	0	11	10.8
Chuuk						
single	86	25.7	0	0	86	15.5
married	47	17.2	0	0	47	8.5
Yap						
single	7	14.3	0	0	7	7.9
married	6	6.1	1	0.9	7	3.3

Employment. The current use rate among males with wage employment (31%) is nearly double the rate among the unemployed (17%), although for female users the gap is reversed. There is very little difference between the rates of employed and unemployed for both sexes, however.

Educational Status. The rate of marijuana use among students (15+ yrs), as shown in Table 3.1, is about 6%. This is lower than the 8% rate for the general population. Table 3.4, which focuses on comparative marijuana use rates among the school-age population, 10-19, offers a sharper look at the contrast between the drug use of in-school and out-of-

school youth. Marijuana use, like alcohol use, is strongly correlated with educational status. The prevalence rate for out-of-school youth in that age group is 11.5%, nearly four times the rate of marijuana use among those who are still in school. Everywhere in FSM the rate of those not in school is three or four times higher than that of students.

Table 3.4: Current Users of Marijuana (aged 10-19) by Educational Status

	Males		Females		Total	
	N	%	N	%	N	%
FSM						
in-school	28	5.4	3	0.6	31	2.9
out of school	44	18.8	2	1.2	46	11.5
Pohnpei						
in-school	6	3.9	2	1.2	8	2.5
out of school	17	17.0	1	1.2	18	9.6
Kosrae						
in-school	0	0	0	0	0	0
out of school	0	0	0	0	0	0
Chuuk						
in-school	19	7.6	1	0.4	20	3.9
out of school	25	21.0	1	1.5	26	14.0
Yap						
in-school	3	2.7	0	0	3	1.4
out of school	2	13.3	0	0	2	7.4

Ethnicity. The survey sample showed very little marijuana use among non-Micronesian ethnic communities in FSM. Two Pacific islanders from outside FSM were the only other users found. In Pohnpei, the breakdown for marijuana use along ethnic lines paralleled what has been noted for alcohol use. Ngatikese (28%) and Kosraeans (12%) had much higher rates than ethnic Pohnpeians (8%), while Mokilese (6%) showed a lower rate. In Yap, however, where Yapese and Outer Islanders show very similar alcohol use rates, a far different picture emerges for marijuana use. While ethnic Yapese had a rate of over 3%, none of the Outer Islanders in the survey sample were current users of marijuana.

Residence. The highest marijuana use rate was found in rural villages, where the general prevalence rate was over 10% and the male rate was 19%. By comparison, the towns had an overall rate of 7% and a male rate of 13%. The lowest rates were recorded in the outer islands, which registered a general rate of 3% and a male rate of 6%. That the outer islands, where marijuana can not be grown nor easily imported, should have a low use rate is not surprising. One might expect that the towns would show a higher rate than they do in this survey, however. Yet, rural villages seem to be where most of the locally grown marijuana is cultivated just as they offer the seclusion that many young smokers seek.

Other drugs. Marijuana use is closely correlated with alcohol use everywhere in the FSM. Marshall (1991:252-253) cites Oneisom (1991) and Larson (1987) in support of his own findings that drug use in Micronesia is additive rather than substitutive. This assertion is confirmed by our survey, which found that 94% of all current marijuana users (339 of 362 identified in the survey) also drank alcohol.

Breakdown by states

Pohnpei. The overall rate of marijuana use is comparable with the rates for the other states in FSM. The female rate on Pohnpei is higher than anywhere else in FSM; Pohnpei is the only state with a female rate of higher than 1%. Although Pohnpei generally follows the FSM pattern for use rates by age groupings, the base of the curve is much broader than in

other places. The male rate for the 30-44 age group actually exceeds the rate for the 20-29 group on Pohnpei, and the use rate among the 45-64 group is higher than anywhere else in FSM.

Kosrae. The very young in Kosrae apparently do not use marijuana, just as they do not drink alcohol. Marijuana use begins later, with the 20-29 age group, and reaches a high of 32.6% for the 30-44 group. Kosrae is the only state in which marijuana use is recorded for the 65+ age group. No female users were found in the survey, in keeping with the reputation of the state for exercising strong controls over the behavior of its women.

Chuuk. This state shows the highest use rate in the nation. Marijuana use, like alcohol use, is more tightly clustered by age group in Chuuk than it is in other states. Use rates ascend sharply during the late teens, rise to a high in the 20-29 age group, and then fall off quickly for the 30-44 group. Chuukese society seems to sanction peccadillos like drinking and smoking marijuana during younger years, but this behavior seems to be less acceptable during the years of supposed maturity.

Yap. At 3.6% the overall marijuana use rate in Yap is significantly lower than that of the other states and less than half the national use rate of 8.1%. The low rate for Yap is especially surprising in view of the high alcohol rate there, especially among women and older persons. The survey data show that marijuana use appears to be confined to the young adult age groups (15-44) and then disappears entirely. Perhaps the widespread use of betelnut, a stimulant, makes marijuana less desirable. In contrast with relatively high female alcohol use rates, Yap shows a very low rate of female marijuana use (0.4%) that is half the national rate for women.

Consumption Patterns

Table 3.5, which shows the frequency of marijuana consumption by current users, indicates that half of the males (who comprise 95% of all users) smoke daily. Chuuk has the largest percentage of daily male smokers (56%), followed by Pohnpei (48%). The percentage of daily smokers in Kosrae and Yap is only half as great (26%), with most of the male users in these two states smoking a few times a week. Chuuk, the state with the highest frequency of use, shows that almost three-quarters (73%) of all marijuana smokers there use the drug every day or every other day.

Females were more occasional users than men. As Table 3.5 indicates, only slightly more than one-third of all women using the drug smoked several times a week, while most smoked much less frequently.

This survey indicates that Chuuk reports high consumption levels to match its high frequency levels, for nearly two-thirds of Chuukese marijuana users (63%) smoke four or more cigarettes a day (see Table 3.6). The average number of joints smoked a day in Chuuk over the past 12 months was 4.2, compared with the FSM-wide average of 3.5 daily. This differs markedly from the consumption pattern recorded for Pohnpei and Yap, where 75% of all users smoked 1-3 marijuana cigarettes on any day that they used marijuana. The average daily number of marijuana cigarettes smoked in Pohnpei and Yap were 2.8 and 2.3 respectively. Kosrae showed a higher level of consumption than Pohnpei and Yap, but lower than Chuuk; 74% of its users smoked 2-4 cigarettes a day with an average of 3.1 daily.

When the frequency data from the survey are computed against the average daily usage reported, we can easily derive the total amount of marijuana consumed in a year and the amount consumed by the average marijuana user in the same period of time. This latter figure may be a better index of the relative usage in each state. Using frequency and consumption data from the survey, then, we calculated the average number of marijuana cigarettes that a user smokes in a year as follows:

Pohnpei 505
Chuuk 860
Kosrae 460
Yap 355

Chuuk, which has a slightly higher prevalence rate than the FSM average, has a much higher yearly consumption rate per user than the other states. At the other end of the scale is Yap, which also shows a prevalence rate considerably lower than the other states.

Table 3.5: Frequency of Marijuana Consumption by Current Users
(Percentage, with rows totaling 100%)

	Daily3-4 times wk1-2 times wk1-3 times mo				less than monthly
FSM					
Males	50.0	16.5	16.5	13.0	3.8
Females	17.7	17.6	23.5	23.5	17.6
Total	48.1	16.6	16.9	13.5	4.4
Pohnpei					
Males	47.9	10.7	26.4	10.0	3.3
Females	14.3	14.3	28.6	21.4	21.4
Total	44.0	11.1	26.7	11.1	5.2
Kosrae					
Males	26.1	26.1	39.1	8.7	0
Females	0	0	0	0	0
Total	26.1	26.1	39.1	8.7	0
Chuuk					
Males	56.0	17.0	7.1	15.4	4.4
Females	50.0	0	0	50.0	0
Total	56.0	16.8	7.1	15.8	4.3
Yap					
Males	26.3	36.8	15.8	15.8	5.3
Females	0	100	0	0	0
Total	25.0	40.0	15.0	15.0	5.0

Table 3.6: Usual Number of Marijuana Cigarettes Consumed per Day and Average Cigarettes Smoked Daily
(Percentage, with rows totaling 100%; daily average of marijuana cigarettes smoked in last column)

	(Daily Avg)						
	1	2	3	4	5	6	+
FSM							
Males	17	25	11	12	17	17	3.6
Females	65	18	6	12	0	0	1.7
Total	19	24	11	12	16	17	3.5
Pohnpei							
Males	27	35	11	8	8	9	2.9
Females	79	7	7	7	0	0	1.4
Total	33	32	10	8	7	8	2.8
Kosrae							
Males	9	30	22	22	17	0	3.1
Females	0	0	0	0	0	0	0
Total	9	30	22	22	17	0	3.1
Chuuk							
Males	10	18	9	15	21	27	4.2
Females	0	50	0	50	0	0	3.0
Total	10	18	9	15	21	27	4.2
Yap							
Males	26	21	26	0	26	0	2.3
Females	0	100	0	0	0	0	2.0
Total	25	25	25	0	25	0	2.3

Note: Average is based on marijuana cigarettes smoked only on those days that marijuana was used.

If the consumption figures reported in the survey are taken at face value, the 353 current marijuana users in FSM smoked approximately 250,000 marijuana cigarettes during the past year. By using the figures on total current marijuana users in the FSM general population (Table 3.7), we can estimate the amount of marijuana smoked last year throughout the nation-860,000 cigarettes in Pohnpei, 175,000 in Kosrae, 2,200,000 in Chuuk, and 120,000 in Yap. Of the total estimated 3,350,000 marijuana cigarettes smoked during the year in FSM, two-thirds were smoked in Chuuk.

Total Estimated Marijuana Use

When the survey sample is adjusted for age to yield a representative sample, the number of current marijuana smokers can be estimated. For the entire nation the number of marijuana users can be estimated at just below 5,000, as Table 3.7 shows; only about 200 of these are female, all the rest are males. More than half of them are from Chuuk State; the smaller states of Yap and Kosrae have only about 330 each.

Table 3.7: Estimated Number of Current Marijuana Users

	Male	Female	Total
FSM	4731	217	4948
Pohnpei	1529	175	1704
Kosrae	338	0	338
Chuuk	2543	31	2574
Yap	321	11	332

Lifetime Prevalence

Lifetime prevalence data, which was sought for all types of drugs, was found to be much more robust for marijuana than for alcohol use. A comparison of lifetime use of marijuana with current use is presented in Table 3.8, which shows a significant difference between the two in some of the states. This is not remarkable of itself, for users of marijuana often outgrow the habit, as we have seen in our discussion of the prevalence rates for the various age groups. Hence, the difference between lifetime and current rates for older age groups might simply indicate that a certain number of individuals who had been regular marijuana smokers in their 20s dropped the habit in their later years.

Of greater interest, however, is the difference between lifetime and current use recorded for the lower age groups in some states, a difference that is especially large in Pohnpei and Yap. This difference implies that some of those who had been smokers just a few years earlier gave up marijuana. One user out of 15 from the FSM 15-19 age group, representing 7% of the total, dropped marijuana, and ten percent of the lifetime users from the next age group (20-29) quit smoking. The decline of 28% in the 30-44 age group, although much greater than the younger groups, could be attributed to the fact that people who used marijuana when they were younger simply gave it up as they matured.

Table 3.8: Current & Lifetime Users of Marijuana, by Select Age Group, with Number and Percentage of Those Who Have Given Up Marijuana

	15-19	20-29	30-44	45-64
FSM				
lifetime users	83	187	158	20
current users	68	159	113	12
difference	15	28	45	8
diff as % of lifetime users	18.1%	15.0%	28.5%	40%
Pohnpei				
lifetime users	34	70	77	13
current users	22	53	48	8
difference	12	17	29	5
diff as % of lifetime users	35.3%	24.3%	37.7%	38.5%
Kosrae				
lifetime users	0	9	14	1
current users	0	7	14	1
difference	0	2	0	0
diff as % of lifetime users	0%	22.2%	0%	0%
Chuuk				
lifetime users	44	94	57	5
current users	41	89	46	3
difference	3	5	11	2
diff as % of lifetime users	6.8%	5.3%	19.3%	40%
Yap				
lifetime users	5	14	10	1
current users	5	10	5	0
difference	0	4	5	1
diff as % of lifetime users	0%	28.6%	50%	100%

Survey data on the younger age groups, particularly from Pohnpei, suggest that a number of young marijuana users are choosing to give up the habit while they are still well within the ordinary age range for smoking. The figures from Pohnpei show that one-third (33%) of the lifetime users in the 15-19 male cohort (30) were not smoking marijuana over the past year. The drop in use is also significant in the two next older age cohorts. Only 53 of 70 of the lifetime users in the 20-29 cohort have smoked in the last year; thus, 25% appear to have stopped smoking. Of the 77 lifetime users in the 30-44 cohort, 29 have dropped the drug. This age cohort shows a 38% fall off in the use of marijuana.

The conclusion may be drawn that dropping the drug does not simply occur as a function of age, with young people outgrowing the use of marijuana, for a significant number of males drop marijuana at an age when they still might be expected to smoke the drug. This is a finding that has a great bearing on treatment strategies, since it would seem that an appreciable number of young people give up the drug without recourse to formal treatment. Reasons for this are not clear from the survey, but other informal interviews and reports suggest that some of the young smokers do not like the effects that the drug has on them, especially the paranoia and social withdrawal that many young people speak of. If so, those who have voluntarily given up marijuana might be prompted to share their experiences with at-risk youth or actual users in an educational campaign to decrease the use of the drug.

Chapter 4: INHALANTS

The Cultural Context

The use of inhalants does not seem to be very widespread in the FSM and there are very few references to it in the drug literature on Micronesia.

The practice seems to be more common in Chuuk than in other places, although there is evidence from the present survey that it was also carried on to some extent in Pohnpei. During his 25 years in Chuuk, the author occasionally heard stories of young boys sniffing gas or paint thinner to produce a "high." Marshall (1991:351) writes that "during the summer of 1985, on Moen (Weno), I was told of boys as young as nine or 10 sniffing gasoline." Some of the heaviest users seem to have suffered brain damage as a result of their excesses, if one is believe the stories that are told of them. Not

infrequently, one would encounter an elementary school drop-out who exhibited strange or even deviant behavior that was attributed to gas sniffing. Rubinstein (1980:10) tells of a troubled young man in his early twenties who had begun sniffing gasoline before the age of 12 and who might have suffered brain damage as a result.

Glue sniffing is another form of inhalant use seen in Chuuk and Pohnpei. During his fieldwork in Chuuk during the early 1980s, Larson (1987:229) noticed that glue sniffing was becoming more popular among young adolescents in Chuuk. Other expatriates on Pohnpei have made similar remarks. One young Peace Corps teacher in a rural village on Pohnpei noted that Crazy Glue was sold in nearly all the village stores and that he has had to take tubes away from his students at times.

The use of inhalants, although not very widespread, is the first rung on the drug ladder for some Micronesians. Young boys may begin sniffing in their early teens but usually stop well before they reach the age of 20, usually moving on to marijuana smoking and then alcohol. An added cause of concern is the well documented health risks that inhalant abuse poses. These range from lead poisoning to brain damage and possible higher incidence of mental disorders (Marshall et al. 1994:26-28). Despite the dangers they present, the use of inhalants has not received much attention- "in part because the substances that are abused by sniffers are legal, easily obtainable, and normally not viewed as drugs" (Marshall et al. 1994:24).

Inhaling is one of the rare types of drug use that is done outside of social context. Unlike drinking and even smoking marijuana, drugs around which social rituals have developed, the use of inhalants is usually a solitary activity. Young boys will normally go off by themselves, sometimes with one other friend, to sniff gas or glue in some out-of-the-way place where they will not be disturbed by adults. Even if the boy goes with a friend, almost no social interaction at all takes place while the two are sniffing.

Survey Data on Inhalants

The survey data showed inhalant use only on Pohnpei and Chuuk; no indication of use was found on Kosrae or Yap. Even when informants in these two states were asked to double-check the survey forms for inhalant use, they could come up with no instances of gas or glue sniffing.

The survey found only 12 people currently using inhalants, 10 from Chuuk and two from Pohnpei.

The number of those who once used inhalants but have not done so during the year prior to the survey was considerably larger than the number of current users. Nine people from Pohnpei and 72 from Chuuk were reported to have sniffed gas or some other substance at some time in their life.

A caution is in order here. Sniffing may be underreported in this survey, despite the vigilance of the field investigator in insuring that informants carefully record all cases of this in their data sheets, because of the limitations of this type of survey and the atypical nature of this kind of drug use. Sniffing, far more than any other type of drug use in FSM, is a "hidden vice;" boys characteristically sneak off and sniff the substance alone and out of sight of others. This and the fact that it is normally practiced for a limited time, in late childhood or early adolescence, before it is dropped (and often forgotten) make it much more difficult to detect in a key informant survey such as this.

Current Prevalence Rate by Sex and Age

Of the 12 current inhalant users reported in the survey, all but one were males. Hence, the familiar sex-linked pattern of drug use found for alcohol and marijuana, with males using drugs and females generally abstaining, is also seen here. This pattern is confirmed in the survey data on lifetime prevalence that will be presented below.

Use of inhalants is tightly circumscribed with respect to age, with the great majority of the users (83%) falling in the 10-19 age cohort.

Data for Chuuk, the only state recording a significant number of current users, shows a prevalence rate of 2.9% for males aged 10-14, and 1.5% for males aged 15-19. The male prevalence rate for the combined age groups is 2.2%

The figures for inhalant use recorded in this survey are low in comparison with those derived from other drug surveys. In a 1985 survey conducted of 852 students at the 4th to 12th grade levels-that is, between the ages of 10 and 20-in several schools on Weno, Chuuk, 9.9% of the total sample claimed that they had sniffed gas or some other substance at some time in their life (Marshall et al. 1994). Unfortunately, the study offered no breakdown by sex. The results of this survey are similar to one conducted on Saipan of junior and senior high school students in 1987; 9% of those surveyed had used inhalants (Lord 1987). Oneisom (1991) reports that 5% of the 121 persons he interviewed in a convenience sample in Chuuk in 1985 claimed to have tried

sniffing at least once. It should be noted, however, that all of the above studies measured the lifetime prevalence rather than the point prevalence rate of inhalant use.

Table 4.1: Current Users of Inhalants by Sex and Age

	10-14		15-19		20-29		30-44		Total (10 +)	
	N	%	N	%	N	%	N	%	N	%
Pohnpei										
Males	0	0	1	0.6	0	0	1	0.6	2	0.2
Females	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0.3	0	0	1	0.3	2	0.1
Chuuk										
Males	5	2.9	3	1.5	1	0.3	0	0	9	0.7
Females	0	0	1	0.5	0	0	0	0	1	0.1
Total	5	1.6	4	1.0	1	0.2	0	0	10	0.4

Table 4.2: Lifetime Users of Inhalants by Sex and Age

10-1415-1920-2930-4445-64Total(10 +)													
	N	%	N	%	N	%	N	%	N	%	N	%	
Pohnpei													
Males	0		2	1.2	0	0	6	2.8	1	0.9	9	1.0	
Females	0		0	0	0	0	0	0	0	0	0	0	
Total	0		2	0.6	0	0	6	1.4	1	0.4	9	0.5	
Chuuk													
Males	3.5		6	15.7	6	18.5	5	25.8	5	6	3.4	70	5.8
Females	0	0	1	0.5	0	0	0	0	1	0.5	2	0.2	
Total	1.9		6	16.4	2	18.2	9	25.4	6	7	1.9	72	3.1

Lifetime Prevalence Rates

The lifetime prevalence rates recorded in the survey may offer a more accurate measure of the extent of inhalant use in Pohnpei and Chuuk. The lifetime prevalence rates in Pohnpei for males of select age groups run from about 1% to nearly 3%, as Table 4.2 indicates. Those in Chuuk, which are much higher, range between 3% and nearly 9% for males. The lifetime prevalence rate for males, 10 years of age and older, in Pohnpei is 1%, while for Chuuk it is nearly 6%. The figure for Chuuk at least is comparable with other surveys done there during the 1980s.

Frequency of Use

As Table 4.3 shows, inhalants are not used as frequently as alcohol and marijuana. Most current users (73%) sniff one or twice a month or less frequently; only three users, or 27% of the sample, are reported to be sniffing as often as once a week.

Table 4.3: Frequency of Inhalant Use by Current Users

	Daily		3-4 wk		1-2 wk		1-3 mo		>1 mo		Total
Males	0	0	2		5		3		10		
Females	0	0	1		0		0		1		
Total	0	0	3		5		3		11		

Note: All current users, from Pohnpei and Chuuk, are included in this table.

Other Observations

Inhalant use would appear to be a real problem in Chuuk alone of all the states. Informants from Kosrae and Yap say that gas sniffing is a rare occurrence in these places. The absence of inhalant data in our survey on these places confirms this contention. Observers on Pohnpei report that in the past use of inhalants was probably greater than it is now. They explain the decrease as due to more pastimes for young boys on the island with the construction of basketball courts and the development of other recreational outlets. There is another, more ominous explanation that some offer for the decrease on Pohnpei-the tendency of boys to use alcohol at an increasingly younger age. The relatively high percentage of Pohnpeian drinkers among the 10-14 and 15-19 age groups noted in this survey would seem to support that explanation.

Chapter 5: HARD DRUGS

Background

"Hard drugs," as it is used here, is a catch-all term to include amphetamines, heroin, cocaine, hallucinogens, and all other illegal substances with the exception of marijuana. It does not include barbituates or tranquilizers, since there is nothing to suggest that these are used, or even known, in FSM.

Despite the well-publicized drug problems in Palau to the west and in Guam and the Commonwealth of the Northern Marianas to the north, FSM has always been perceived as having escaped the serious drug problems of its neighbors. From time to time one hears reports of an individual using a strange "white powder" or even injecting with needles, but these have always been isolated instances and the individuals in question have either been non-Micronesian visitors or Micronesian young men who have recently returned home after years of living abroad. There is nothing to suggest that these rumored drug users have been responsible for spreading the habit to others in their community. On the contrary, the speed with which such reports die out would seem to indicate that these individual users have either dropped their habit or left for another part of the world where they can procure drugs more easily and practice their drug habit in privacy-something that is not afforded them in Micronesian communities. Until recently there has been no report of any regular supply line for hard drugs from outside.

The only indication of a serious "hard drug" problem in FSM stems from a questionnaire administered in 1992 to over 6,000 FSM students between the ages of 12 and 18. The self-reported prevalence of drugs in this age group was surprisingly and perhaps improbably high: over 2% claimed to be using cocaine, 6% reported using injectible drugs, and nearly 5% said that they were taking steroids (Reed 1993).

Survey Data on Hard Drugs

The present survey picked up only one current user of hard drugs. He is a male living in Pohnpei, although not an ethnic Pohnpeian nor even Micronesian, who is reported to be using cocaine and heroin.

The lifetime users reported in the survey were three: two residents of Pohnpei (including the current user) and a young man from Chuuk. All three are males, one in his late teens and the other two in their mid-30s. All three once used heroin, with the two older persons using cocaine as well. In keeping with the finding that drug use in Micronesia is additive rather than substitutional, all three are also currently using alcohol and marijuana.

If such a slender data base may be used to project the current number of lifetime users in Pohnpei and Chuuk, there may be 15 males in Chuuk and 25 in Pohnpei who have used hard drugs at some time in their life. No users, current or lifetime, were picked up in either Kosrae or Yap.

While the survey data may accurately represent the scale of the problem in Pohnpei and Chuuk, and perhaps even in Kosrae with its strict community controls, there is some anecdotal evidence that the survey falls short of accurately representing the scope of the drug problem in Yap. A young man who died a violent death last year was found in the autopsy to have traces of "ice" in his system. Although informants would not identify anyone as a confirmed user of hard drugs, some suspect that several young men in Yap are currently using "ice." Estimates on the number of users range from four to "between 10 and 20." Yap, situated as it is between Palau and Guam, is the most natural gateway for hard drugs into FSM.

Even though the introduction of hard drugs into other parts of FSM must always be considered a real danger, this does not seem to have happened yet. Hence, drug prevention policy ought to ignore hard drugs for the time being and focus instead on alcohol and marijuana.

Chapter 6: PREVENTION AND TREATMENT

Review of Findings

- Everywhere in Micronesia, drug use is additive rather than substitutional. Hence, those who use marijuana or other drugs are also regular users of alcohol.
- As a rule, drug use follows gender lines, with males using drugs and females generally abstaining. The only notable exceptions are in Yap and Pohnpei, where alcohol use among women represents a significant percentage

of the total users.

- The use of "hard drugs" (ie, cocaine, heroin, amphetamines and hallucinogens) is still negligible. There is no clientele for hard drugs in FSM at present with the possible exception of Yap, which bears close watching and which may soon have to work out appropriate intervention strategies.
- Inhalants (gas and glue sniffing) are a problem among young teens in Chuuk and to a much lesser degree in Pohnpei. Those who sniff gas or glue discontinue the practice and graduate to other drugs by their late teens, but by then the physiological and/or psychological damage is done.
- Marijuana is commonly used by young males in every state, especially by those between the ages of 15 and 44. Although it is a considerable problem in Chuuk, the prevalence rate of marijuana use seems to be declining in Pohnpei and Yap.
- Alcohol is by far the greatest drug problem in FSM. In most places the great majority of young males drink, with the prevalence rate highest among those in their 20s. Drinking appears to have increased among older age groups (45+), and a sizeable number of women in Yap and Pohnpei are now drinking.
- Binge drinking is a common practice in every part of FSM, in keeping with island styles of consumption. The average daily consumption of alcohol, as reported in the survey, is the equivalent of two six-packs or 12 drinks a day.
- There are currently over 11,000 problem drinkers in FSM. More than one-third of all males over the age of 15 can be designated problem drinkers inasmuch as they drink heavily and manifest behavioral problems related to their drinking.

Culturally Appropriate Intervention

The question of what type of intervention should be attempted is a critical one. We ought not assume that Micronesia needs more of the same kind of prevention and treatment strategies in the future. Models of intervention adopted from Western societies have often been adopted uncritically in the past. While these should not be a priori dismissed out of hand, they should be carefully evaluated for their effectiveness.

Needless to say, any strategy for intervention that is to succeed must be culturally appropriate. It must take account of island values, the social reasons for the use of alcohol and other drugs, and the mechanisms of social control within the island society. It must not assume that these values or social levers are the same as those in the US and so can be used accordingly.

Some Western-style programs, such as those modeled on the Outward Bound Program, appear to have had some success over the years, especially when counselors follow up on those who have taken the three-week program with regular personal interviews and counseling sessions. The same might be said for "Big Brother" type programs such as "Second Chance" in Yap. As important as the initial program itself is the relationship that often develops between the individual youth and the counselor. The bonding element appears to be decisive in these programs, although even successful bonding does not guarantee equal success in leading youth to moderation or sobriety.

On the other hand, many programs that have proven effective in the US have not worked in Micronesia. The most notable example is Alcoholics Anonymous, which was first brought to the islands by well-intentioned Peace Corps volunteers in the 1970s and was periodically reintroduced by expatriates since. These experiments "inevitably fail when the novelty wears off or when the initiator leaves the island" (DuPertuis 1988:20). AA has had no lasting impact on the islands, and probably never will, for reasons that DuPertuis and other commentators have easily discerned. Anonymity in a tightly-knit island society is impossible, and islanders know that they can expect to meet people in their support group on an almost daily basis outside of the meetings. Furthermore, Micronesian males are not given to sharing with others the intimate details of their lives, to say nothing of the serious personal problems and reverses that drinking has caused them.

AA does offer its members a small support community, but this type of a community can only seem artificial to Micronesians, embedded as they are in vital, functioning communities. The same can be said of the religious dimension of AA, with its appeal to a "Higher Power." This notion represents the blandest type of deism compared to the doctrinal richness of the "salvation" that Christian churches offer their members. In summary, AA is asking its members to pretend that they are in a large, anonymous society and tell their life story to others who probably could add spicy details of their own to the narrative. Members are to do this in the embrace of an artificial community and they are expected to draw inspiration from a general concept that is only vaguely related to their real-life church teachings. Given these liabilities, it is not surprising that AA has had very limited success in the islands.

Programs modeled on AA have had some success in American Samoa, according to Whitney (NDA:15-17). When the program is modified to do away with the sharing of life history and the emphasis on individual failings, and when it takes on enough of the local cultural features to serve as a comfortable support group for islanders, the program can be effective. Even then, however, by Whitney's own description, it takes on many of the characteristics of a church revival group.

The tendency of foreigners to fall back on AA-type programs as a form of treatment for alcohol abuse is like their recourse to the "hot-line" approach when planning intervention strategies for suicide attempts and spouse abuse. Whatever success this might have in the US, the assumption that an islander will pick up a phone and pour out his heart to an unknown person at the other end of the line is simply unwarranted.

The Role of Church Groups

Drug use in Micronesia, as we have attempted to show earlier, is governed by cultural norms that are inimical to pleas for moderation. Drinking and drug use is normally a social event in which participants are expected to comply with the wishes of all the others who join the circle. The prevalent attitude toward consumption, as researchers in the Pacific have repeatedly observed, is to finish off everything that is provided, the goal being that "one should continue until the effect is felt as fully as possible" (Larson 1987:222; see also Whitney NDb:95). In view of these cultural norms, abstinence is generally recognized as a more effective strategy than moderation.

Micronesians may rue the effects of their drinking or drug episode afterwards, but they do not regard the episode as the effect of an ineluctable compulsion. The disease model of alcoholism is not widely accepted in the islands, since people believe they can control the use of alcohol, and the use of other drugs, with willpower. Alcoholism-as-sin is more in line with Micronesians' worldview than alcoholism-as-disease.

Over the years, some of the most successful abstinence-type programs in Micronesia have been church-run. The major denominations, Catholic and Protestant, have their own anti-alcohol and drug programs, as do most of the smaller sects. While these church programs have their own distinctive features, they share some common traits that seem to be necessary conditions for effective abstinence programs in the islands.

A look at the "Mwichen Asor," a Catholic group in Chuuk, may illustrate some of these features. Young men join the group when they kneel before the altar to make their promise to abstain from alcohol or drugs, or possibly other things, for a specified period of time. Most young men pledge for three to six months, often renewing their pledge at the end of this period, but some pledge for longer and occasionally a person swears off for life. Frequently a rather large number of young men from the same village take the pledge together. They then join the village chapter of "Mwichen Asor," which meets frequently, sometimes even nightly, to sing church songs, listen to pious talks, and socialize with others who have sworn off alcohol. On one Sunday each month, the village members join with those from other villages after mass to celebrate an island-wide meeting that offers singing (sometimes competitive singing between village groups), speeches on the religious meaning of what the youth are doing, and food.

Protestant youth groups may differ in some details, but they all include the same essential elements: companionship with select other youth from their actual community, a meaning to their abstinence ("sacrifice" in the case of Mwichen Asor) derived from a familiar religious belief

system and surrounded by religious symbols, and regular support sessions from the group to keep motivation at a high level.

It is conceivable that such a group could be replicated in village communities but without being affiliated with a church. Even lacking the religious symbolism, such a youth group might command a sizeable membership and be able to promote abstinence from alcoholic beverages. Yet, one wonders whether such a group would be as successful as many of the religious youth groups, and why the creation of a new group would be necessary in the first place. To establish parallel secular structures in the local communities for the control of drug and alcohol abuse is not only costly but usually less effective than relying on what already exists. Yet, this is what we sometimes have attempted to do in Micronesia.

DuPertuis may overstate the matter when she maintains that the churches are "the only institutions which take a stand against alcohol," but it is difficult to take exception to the rest of what she writes:

At the state-wide level, the denominational churches offer the possibility of disseminating information to and exchanging ideas from the local communities. And on the community level, they offer the possibility of active, effective public community-level social control. While the sectarian positions on alcohol are now fixed and seem viable enough for the small numbers who adhere to them, the denominations are trying to readjust their abstinence style toward a realistic yet effective policy in the control of alcohol problems. (1988:22)

Treatment Strategies

In his article, "Strategies for Alcoholism Counseling in Hawai'i," Scott Whitney (NDb:104-105) sees two pathways to recovery for Hawaiian males who abuse alcohol: "the Vow" and "reaffiliation." By "the Vow" he means a decision not to drink again, often made in a religious context. As we have seen above, the churches in Micronesia offer drinkers a meaningful framework within which to make such a vow or pledge, and most of these same churches operate what can be called support programs to maintain motivation and provide a helpful social surrounding.

By "reaffiliation" Whitney means the change of allegiance from one's drinking buddies to a sober group. In Micronesia it is expected that this will happen naturally as one ages and gradually ascends into a new and more respected status in the community. Social pressure builds on the male during his 30s to give up the joys of adolescence, among them heavy

drinking, to concentrate on his obligations toward his family and community. Hence, reaffiliation is the natural conclusion to an early stage in the life cycle of islanders. Or so the process has worked in the past, at least, when the young adult was eventually reintegrated into his community after giving up his excesses.

But reaffiliation can occur earlier, as when at-risk youth bond with counselors or other older role-models in a program like "Second Chance" in Yap. To the extent that they are able to continue their positive relationship with these older persons, they may continue to avoid excess drinking and other drug use. It should be understood, however, that the factor that tips the balance is the relationship itself rather than any skills competence the youth may have acquired in the course of the program. Relationships rather than achievements continue to define the self in Micronesia.

This is not to say that there is no place for individual counseling services at treatment centers. A number of young people with drug problems have received good advice and warm encouragement from the staff at these centers, but the latter can only point them toward one of the paths about which Whitney writes. Whether the clients are youth or older adults, they must be encouraged to make a fundamental decision (or "vow") with regard to the problem drug and they must be directed toward a support group that can sustain them ("reaffiliation"). Hence, the paths of effective treatment lead back to local institutions, especially the churches.

Prevention Strategies

If prevention strategies are targeted at the youth to keep them from drinking and other drug use, then they have met with utter failure, since the vast majority of males in the 20-29 age bracket today drink, and a great many of them drink heavily. Curricular units in the schools on the harmful effects of drug and alcohol abuse appear to be having only a marginal impact on the decision that young people make as to whether to use drugs or not. Recreational facilities like village basketball courts undoubtedly offer young people alternatives to evening drinking and so may have reduced the quantity of alcohol consumed, but it is unlikely that these have caused many youth to eschew drinking and drug use altogether. Even church-sponsored abstinence groups command but a relatively few adherents, although they have the effect of driving drinking underground. Programs of this sort, although they can make drinking slightly less acceptable, seem to have a minimal impact in reducing the number of young drinkers. This is not surprising since, as we have seen, males are more or less expected to engage in drinking during their youth.

Drinking and drug use in Micronesia is not the product of an individual choice; it is the consequence of a set of cultural expectations that encompass young and old alike. To put the matter simply, Micronesians are taught from an early age how important it is to conform to social expectations, and the expectations are that young males will drink. Moreover, they are expected to drink heavily, because people are expected to enjoy everything with abandon.

Prevention strategies, therefore, can take two basic approaches. They can attempt to influence young persons to swim against the tide and forswear the use of all drugs, or they can work to change the direction of the tide—that is, popular expectations. The latter is not as sisyphian as it might seem, when we recall similar reversals that have been effected in recent years. Smoking was banned on all flights and in all government offices by a nation in which nearly half the population smokes. Over-water outhouses, which were used nearly everywhere in the state, were eliminated practically overnight in Chuuk following a cholera outbreak in the early 1980s. It would seem that we might have reason to hope for a similar turn-about in expectations regarding drinking and drug use.

To bring about a change of public attitude toward drinking, the public must be helped to look at itself and catch a reflection of the consequences drinking and drug use are having on the society. It is not enough to view only the health issues or the loss of life. The type of cost-benefit analysis islanders must have if they are to be roused to public action includes an honest look at the social gains as well. In other words, the problem of alcohol use cannot be adequately explored unless the benefits of alcohol as a release from stress and an aid in coping with anger are addressed. This kind of public education program must be targeted at adults in the community, since it is they who establish the community norms.

The Role of Government Agencies

There is an important role for government agencies, especially the Division of Mental Health and Substance Abuse that exists in every state, but this role is in need of some redefinition. Thanks to the substantial SAMHSA block-grant funds that have poured into FSM over the past five or six years, the state offices have greatly expanded, hiring new employees and broadening the services that they offer the public. This expansion has been rapid and state programs have not always been as carefully designed as they might have been. Some states have hired on new personnel in an effort to set up an outreach program in remote islands and villages on the premise that their offices should attempt to reach into the very bowels of the communities.

As government substance abuse offices have grown and developed their own outreach programs, they are tempted to establish programs that parallel those of community organizations rather than complement them. Instead of calling on the local private organizations for help in implementing their substance abuse programs, the states sometimes devote their energies to maintaining their own programs. Hence, the state and church groups run the risk of becoming competitors at the grassroots level rather than partners. Serious thought should be given to cutting back the size of government offices in most states, if for no other reason than that this would oblige them to develop partnerships with local community and church groups at the village level.

The role of government agencies might well be reexamined. While the states should be encouraged to continue the direct treatment work that they now do from their offices, they should be relieved of the burden of having to provide outreach into distant communities. At the same time, they will have to expand their links with private groups to ensure that these communities are served. Notwithstanding the treatment the state offices do, their primary focus should probably be on prevention rather than treatment.

The role of government agencies might include these items:

- **Public education.** The government office should gather or prepare materials needed for public education on drug and alcohol use, locally-oriented materials as well as standard items from abroad. They should make this available to other institutions that may want to include a module on drugs/alcohol in their programs, whether the form of the education program is a radio program, a state fair, a community celebration, or school class.
- **Networking with community organizations.** The staff of the government Substance Abuse Center should be a resource to be tapped by other community organizations when they need help in addressing these concerns. The staff should be prepared to assist them in planning for presentations, radio spots, workshops, and summer programs. They should also coordinate meetings between the various institutions, government and NGO, attempting to prevent drug and alcohol abuse.
- **Referral treatment work.** The government office could handle particularly difficult individual cases, especially those referred to the agency. It might also be able to help those in town who might lack other affiliations from which they could seek help. Treatment work with individuals should take up a rather small fraction of the agency's time, since most treatment would ideally be done by NGOs.
- **Training.** The government staff should run training programs, if only for a day or two at a time, for local church pastors, youth organization leaders, and key persons in the communities who may be called upon to deal with drug and alcohol problems. This is one of the most important services that the government staff can provide.
- **Data keeping.** The staff should maintain records on more than just their own caseload. They should keep statistics on drug prevalence rates as indicated in all studies of their state; social indicators of drug/alcohol abuse (eg, trauma cases related to alcohol use, arrests and convictions, mortality rates for alcohol-related diseases); and other relevant data.

In view of the social realities in Micronesia and the nature of the alcohol/drug problem described in this survey, the following general strategies are proposed.

- The question of which culturally appropriate forms of intervention are most effective should be reopened and seriously addressed. One should not assume that those forms of intervention that have proven successful in the US will be as effective in Micronesia.
- Every effort should be made to make use of existing grassroots community institutions, especially the churches, in designing intervention strategies. This is cheaper and more effective than expanding government agencies so that they can provide their own outreach.
- Treatment strategies that can be successfully employed with young drinkers and drug users are limited. Abstinence movements would appear to be more effective than summons to moderation. In any case, a community support group is imperative for the reformed drug user, even if this means chapectations regarding drinking and drug use.

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groups run the risk of becoming competitors at the grassroots level rather than partners. Serious thought should be given to cutting back the size of government offices in most states, if for no other reason than that this would oblige them to develop partnerships with local community and church groups at the village level.

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- Treatment strategies that can be successfully employed with young drinkers and drug users are limited. Abstinence movements would appear to be more effective than summons to moderation. In any case, a community support group is imperative for the reformed drug user, even if this means changing his circle of friends.
- Government agencies should redefine their role. Their most important potential contribution would seem to lie in the area of prevention rather than treatment. Accordingly, they should see their role chiefly as promoting public education efforts, networking with other agencies, and training those in the communities who are in a position to do primary-level intervention.
- The most important focus of overall efforts now is prevention of future drug and alcohol abuse. More effective public education should be a priority. This should be aimed at adults, not just those entering adolescence and the at-risk age-group, since adults will determine the expectations placed on the young and the sanctions to be imposed.

Funding Priorities

In keeping with these recommended strategies, the following funding priorities for locally generated and US federal funds are proposed.

- Smaller but more effective state offices should be maintained at a much reduced cost. The FSM national office should be maintained to coordinate state efforts and monitor programs.
- Program funds should be set aside for the training of local community leaders.
- Program funds should be put into public education efforts. These should rarely be stand-alone

programs, but activities tied in with community events or other workshops.

- State meetings of those whose principal work is substance abuse should be held once or twice a year, as well as opportunities for networking with other states on occasion. Funds should be used for sending NGO representatives as well as state agency employees.
- Resource persons should be brought in occasionally to evaluate the programs and/or assist in the training of state agency staff.

Appendices:

SURVEY SAMPLE

Table A1: General Population and Sample Size, by States and Age Groups

	<10	10-14	15-19	20-29	30-44	45-64	65+	Total
FSM								
Population N	31,184	14,749	12,251	15,891	17,748	9,888	3,795	105,506
%	29.6	14.0	11.6	15.1	16.8	9.4	3.6	
Sample	1,395	786	882	1,311	1,233	745	191	6,543
%	21.3	12.0	13.5	20.0	18.8	11.4	2.9	
Pohnpei								
Population N	9,711	4,481	4,156	5,212	5,784	3,140	1,208	33,692
%	28.1	13.6	12.5	15.9	17.4	9.3	3.3	
Sample N	474	280	334	459	436	224	77	2,284
%	20.9	12.3	14.6	20.0	19.0	10.0	3.4	
Kosrae								
Population N	2,000	1,066	780	1,059	1,330	850	232	7,317
%	27.3	14.6	10.7	14.5	18.2	11.6	3.2	
Sample N	91	47	58	104	76	52	22	450
%	20.1	10.4	12.8	23.2	17.0	11.5	4.9	
Chuuk								
Population N	16,540	7,711	6,063	7,923	8,483	4,725	1,874	53,319
%	31.0	14.5	11.4	14.9	15.9	8.9	3.5	
Sample N	570	322	382	610	538	368	67	2,857
%	20.1	11.3	13.4	21.3	18.7	12.8	2.3	
Yap								
Population N	2,933	1,491	1,252	1,697	2,151	1,173	481	11,178
%	26.2	13.3	11.2	15.2	19.2	10.5	4.3	
Sample N	260	137	108	138	183	101	25	952
%	27.5	14.4	11.4	14.4	19.1	10.6	2.3	

Table A2: Sample Size by Communities (Numbers Surveyed)

	Males	Females	Total
Pohnpei (Total)	1177	1107	2284
Enipein	200	169	369
Saladak	221	207	428
Sokehs	151	151	302
Ohmine	187	195	382
Mesihsou	134	130	264
Palipowe	156	137	293
Mokil	128	118	246
Kosrae (Total)	231	219	450
Utwā	62	63	125
Malem	60	53	113
Lelu	109	103	212
Chuuk (Total)	1518	1339	2857
Kuchua	161	132	293
Seletiw	167	184	351
Sapuk	154	169	323
Tunnuk	160	156	316
Sopou	145	149	294
Sapore	196	122	318
Nomwin	169	138	307
Nama	194	160	354
Foup	172	129	301
Yap (Total)	484	468	952
Maa/Thol	114	99	213
Ngolog	114	100	214
Mogmog	74	85	159
Falalop	60	90	150
Kanifay	122	94	216

COMMUNITIES SURVEYED

Pohnpei

General background

The main island of Pohnpei, roughly circular and with an area of about 100 square miles, is the largest island in FSM. Over 90 percent of the state's 33,000 people live on this single volcanic island. It is a lush and fertile island with a rugged mountainous interior that is unsettled. The main island is divided into six municipalities, all of which except for the town area of Kolonia, were once independent chiefdoms with their own political authority. Madolenihmw and Kiti, situated on the southern side of the island, are the largest and the farthest from the town of Kolonia at the northern tip of Pohnpei. Kolonia and its suburbs are home for about 10,000 people, including many outsiders-Americans, Australians, Asians and Micronesians from other places-who work at the national capital five miles out of town. Elsewhere on the island, the local population lives in scattered homesteads and support themselves on breadfruit, yams, other locally grown food, fish, and pigs used largely for ceremonial purposes. The people on Pohnpei are divided religiously; about 60 percent of the population is Catholic, about 35 percent is United Church of Christ, and the remainder are adherents of the Assembly of God, Latter Day Saints, Seventh Day Adventists, and other small sects.

In addition to the main island of Pohnpei, the state has five inhabited outer islands: Sapwuahfik (or Ngatik), Mwoakilloa (or Mokil), Pingelap, Nukuoro and Kapingamarangi. The last two of these are Polynesian outliers on which entirely distinct languages are spoken. The population of these five islands combined is a little more than 2,000 (most have more of their number living on Pohnpei than on their own island). The lifestyle in the coral outer islands is subsistence; there are no salaried jobs to speak of. Except for Ngatik, which has a sizeable Catholic community, the outer islands are predominantly Protestant.

Communities Surveyed

Enipein Pah (Kiti) Enipein Pah is a rural community on the southern side of the island, as distant as one can be from the port town and its conveniences. Nearly all the population is ethnic Pohnpeian. Most of the people are not wage earners, but live off the land. Most adults drink sakau almost daily. Many of the alcohol users seem to be primarily sakau drinkers who may have one or two cans of beer after finishing their sakau in the evening. A good number of the males up to the 40s smoke marijuana, most of which locally grown. It is a close-knit community in which everyone knows all the others in the village. The educational attainment of most adults is limited to 6th to 8th grade level. The overwhelming majority of the village population are Catholic.

Saladak (U) This is a village in U, close to the Madolenihmw border, that is well out of town. At the small sakau markets which dot the roadside adults gather for the ritual evening sakau pounding and conversation. Alcohol use among the older folks is limited to one or two cans of beer or chasers. The younger men tend to consume more alcohol. Marijuana is grown for local consumption and for sale outside the village. The village is largely Protestant and church ministers wield a considerable amount of authority. Some of these ministers expressed gratitude for the survey as they are contemplating approaches/programs to address drug and alcohol abuse among the youth.

Ohmine (Kolonias) Ohmine is a section of Kolonias, the main town in Pohnpei. It has a mixture of different ethnic groups; Pohnpeian, Kosraean, Chuukese, Yapese, Ngatikese, with a few Americans, Japanese and Palauans added. For this reason, there is no real sense of community belonging in this sub-section of the town. Relations seemed to point outward, to the places of origin of its polyglot members. The residents of Ohmine are simply thrown together by necessity. The area has a liquor store open all night and catering to late night drinkers. This is the only all-night store on the island.

Mesihsou (Madolenihmw) This area is about 20 miles from town in a municipality that is by law "dry." The population is strongly Protestant and public conduct is guided in good measure by religious tenets. Some drinking takes place, but it is usually done on the sly, not as openly as in some communities. Even a few girls drink, although not openly, and sneak out to meet their boyfriends as they would have in the old days. Sakau consumption is as common in Mesihsou as in any other section of Pohnpei.

Sokehs Pah This section, containing several small villages, is located on the western side of Sokehs Island. Nearly everyone in this section originally came from the Mortlocks in Chuuk, many of them tracing their arrival to the beginning of this century. Nonetheless, most identify themselves as Pohnpeians. All the families but one are Catholic. There is a lot of fighting that breaks out after drinking bouts, especially on weekends, but the trouble is rarely serious. The youth group is a big help in keeping youths occupied and out of trouble.

Palipowe (Nett) This area is not far from town. The area is not particularly traditional and is certainly not rural. There is a high percentage of high school educated adults in the village. For all that, however, the residents believe their family structures are more intact than in other parts of the island. Most of the population are Catholics. The few females who use alcohol do so very discreetly since people frown on women who drink.

Mokil This is a small coral atoll 200 miles from Pohnpei. The population is overwhelmingly Protestant. The lifestyle is a blend of the traditional and modern. Most of the houses are built of concrete and nearly all have solar panels to provide electricity. Each household has one or two water catchment tanks built of cement. Yet, there are few wage-earners on the island other than the eight school teachers; most of those from Mokil who have the education required to get a fulltime job have moved to Pohnpei. Almost everyone on the island smokes cigarettes, with children beginning to smoke at the age of 9 or 10. Marijuana, alcohol and yeast are widely used but not in the open. The marijuana supply is brought in from Pohnpei. Recently girls have been seen drinking yeast with boys in the evenings-something unheard of in former times.

Kosrae

General Background

The state is composed of a single volcanic island with about half the area of Pohnpei Island. The island rises even more steeply than Pohnpei, so the population of some 7,300 is settled along a narrow level band that rings the island. The island is divided into four municipalities (Lelu, Malem, Tafunsak, and Utwe) reflecting the traditional political organization of Kosrae. The main population center is Lelu, actually an islet, and Tofol, adjacent to Lelu and the center of government on the island. Because of the smallness of the population, a

relatively large percentage of the people of Kosrae enjoy wage employment or access to other sources of money. This is seen in the food people eat, their clothes and other externals of their way of life. Kosrae is a strongly Protestant island, with about 95 percent of the population claiming membership in the United Church of Christ.

Communities Surveyed

Lelu This is a tiny island connected to the main island of Kosrae by a causeway, but the municipality extends beyond it to the main island. Formerly it was the capital of the state, and even now is one of the main population centers. The main church is located in Lelu, which is almost entirely Protestant like the rest of the island. Most of the social life in Lelu and elsewhere in the state is centered on church activities. The oldest hotel on the island, located on Lelu, remains in operation until today. An aquaculture center is also located there, along with several medium-sized stores. The entire population of Lelu enjoys the conveniences of town life—telephone, power, etc. The people in Lelu, as in other municipalities, are outgoing and friendly.

Malem This municipality is located just beyond the government administrative center known as Tofol. It is more rural than Lelu, although it too has power and phone service. There is a small level area that is densely inhabited with the remainder of the municipality consisting of highlands and mountainous areas. There is a small hotel located in this area, as well as the now defunct hydro-power plant. The youth in Malem have a reputation as buyers of marijuana grown in Tafunsak.

Utwe This municipality lies at the end of the paved road. The lifestyle is rural and much more farming is done here than in most of the other municipalities in Kosrae, although most of the people have phones and power. Mangrove crabs, citrus fruits and fish are sold. Church life is central in this community as it is throughout the state.

Chuuk

General Background

Chuuk is the most populous state in the FSM and the most crowded. Its population of over 53,000 comprises a bit more than half of the entire population of the nation. Yet, its people occupy about 49 square miles of land, one-fifth of the land area of the nation. As densely settled as the state is, political authority is divided into very small units. There are about 40 municipalities in the state, each representing an inhabited island or atoll, and precolonial political boundaries were even more tightly drawn. Over 75 percent of the population live inside the Chuuk Lagoon. This lagoon, the heart of the state, is encircled by a barrier reef of more than 100 miles circumference and contains about a dozen inhabited islands. The most populated of these is Weno, the seat of the state government and the commercial center of the state. Other major islands in the Chuuk Lagoon are Toloas, Fefan, Uman, Udot, Romanum and Tol. There is a very small expatriate population in Chuuk and a limited private sector consisting mostly of retail stores. Although people wear western clothing and have taken on some of the other externals of a western lifestyle, many live a semi-subsistence mode of life and eat the breadfruit, taro and fish that they obtain. The population of the state is rather equally divided into Catholic and Protestant, with some of the latter being Evangelicals and the rest members of the United Church of Christ.

Like Pohnpei and Yap, Chuuk State has outer islands within its jurisdiction. Nearly 12,000 people live on four separate groups of atolls that surround Chuuk Lagoon: the Mortlocks to the southeast, the Westerns due west of Chuuk, the Namonwitos to the northwest, and the Hall Islands to the north. Only the Western Islands, which are closely related to nearby atolls in Yap State, have retained traditional dress.

Communities Surveyed

Seletiw (Weno) This community is almost entirely made up of Mortlockese who have taken up residence on Weno, the state capital and main island of Chuuk. This village is situated close to the airport and not far from the government offices in Nantaku. Many of the Mortlockese residents of this community are wage-earners, thanks to their government jobs or employment in private stores. They remain fervently devoted to the Mortlocks, despite their move into the Chuuk Lagoon, and most are active Catholics. Most of the associations to which people belong are church-related. The people of this community are extremely friendly and tend to be very conservative in most things. The leadership of this community tends to be strong and the people cooperative.

Tunnuk (Weno) This village is at the end of the causeway leading out of town. It is the first non-urbanized village on the north side of the island. The village is the site of the Catholic cathedral, which looms high as one enters the village from the west. Next to it is a Catholic elementary school, perhaps the most highly regarded elementary school in Chuuk. The village is predominantly Catholic, although there is a sizeable minority of Protestants with a church of their own. Several wealthy Chuukese make their home in the village, and there is a rock quarry owned by two FSM congressmen. The leadership of the village has never been strong and the village is as divided today as it ever has been. The youth of Tunnuk have always been regarded as troublemakers.

Sapuk (Weno) This village is actually a conglomeration of four different named villages at the eastern tip of Weno Island. In the eye of a Chuukese, Sapuk is a rural village—the spot where the road ends, literally and figuratively. Looking down on the village from a bluff is Xavier High School, a prominent Jesuit-run educational

institution that is housed in an old concrete building that was a Japanese naval communication station during World War II. On a hill at the very end of the peninsula stands a Japanese-built lighthouse that is something of a tourist attraction these days. The village is religiously divided; it is chiefly Protestant, with four different United Church of Christ congregations, but there is also a small Catholic church and a Mormon church. Sapuk was always a troublespot on the island until the police established a sub-station there two years ago. People now feel comfortable walking around at night for the first time.

Nama This is an island in the northern Mortlocks, 50 miles south of Chuuk Lagoon, with a resident population of almost 900. The island is completely Protestant. Perhaps even more than the rest of the Mortlocks, Nama has had a very high emigration rate into Weno and beyond. Of those who remain on Nama, few are employed but many have regular access to cash. This may be due to remittances and gifts from relatives working abroad. Some families have small generators and most seem to have adopted rice as the staple of their diet along with other Western canned foods. The local food obtained from fishing and farming augment imported foods on the diet, but local foods have become secondary.

Nomwin This is an island in the Halls, 60 miles north of Chuuk Lagoon. The island has about 750 residents at present, nearly all of them Protestant. Like Nama, the island has few persons earning a regular salary. Most of the people live off the fruits of the land and sea, and the salted fish made on the island has a reputation throughout Chuuk for its flavor. The island has its own small boat that makes regular trips into Weno to ferry people back and forth. The island residents are very friendly.

Sapore (Fefan) Sapore is at the southern end of Fefan Island, a half-hour motorboat ride from Weno. The island has a population of about 4,600, three-quarters of them Catholics. Sapore is almost entirely Catholic. The island prides itself as being the "heartland" of Chuuk. Its social values tend to be conservative and the island, but particularly Sapore, is staunchly and openly religious. Fefan is known for its agricultural produce and the handicraft it produces. Fefan has a municipal ordinance prohibiting drinking alcohol on the island that is strongly enforced.

Kuchua (Tonoas) Kuchua, one of the larger villages on Tonoas, is separated from Weno by a three-mile wide channel. This village was once the headquarters of the United Church of Christ mission and is recognized as one of the mother churches of the Protestant conference in Chuuk. It remains strongly Protestant until today. Tonoas also has a historical claim to fame in that it was the headquarters for the Japanese navy during World War II. Many of the residents of Tonoas are employed by the government and commute to work each day by motorboat. Like Fefan, the island has an ordinance banning alcohol.

Sopou (Uman) Sopou is located at the southern end of Uman Island, 45 minutes by boat from Weno. The village is densely settled, although most of the residents have taro patches elsewhere on the island and pick breadfruit from their land. As villages in Chuuk go, this is fairly modernized. There are a number of new concrete houses and a good number of the people seem to have jobs on Weno. The ratio of high school graduates from Sopou is high, with many of its people moving off to Guam or Saipan for work after graduation. The population is almost all Catholic.

Foup (Tol) This village is situated on the island of Tol in the western part of the Chuuk Lagoon, twenty miles or an hour's motorboat ride from Weno. The village consists of a cluster of a few dozen houses in close proximity to one another as well as a number of households widely dispersed over a forested plateau. The people of Foup can accurately be called "rural;" they live off the land and are rough-hewn, as farmers throughout the world can be. About 80 percent of the population is Catholic, and the main church on the entire island complex of Faichuk is located just five minutes down the hill from the main population concentration of Foup. Many of the Foup people have emigrated to Guam for better jobs. Those who returned were said to have brought liquor, marijuana and other drugs with them when they resettled in their village.

Yap

General Background

Yap proper is a congeries of four islands of continental shelf surrounded by a barrier reef. This land mass—sometimes called Yap proper—has an area of about 40 square miles. Yapese are generally regarded as the most traditional people of Micronesia, in or out of FSM. People live in villages that remain under the authority of the old chiefs. A caste system based on the status of the village remains in force even till today. Thatched men's houses built of local materials can be seen in almost all the villages. The local diet, which is often supplemented by store-bought food today, consists mainly of taro and fish. The town area, which engirds the main port and a small bay near it, is small, even by Micronesian standards. A good road system carries employees and school children from town (Colonia) to their villages. Few Yapese live in the town area, preferring instead to commute to and from their home in the village. The residents of the town are mostly Americans, Filipinos, Palauans and outer island Yapese who have moved off their island. About 60 percent of the state population of 11,300 live on the main islands. The state population is 95 percent Catholic.

Part of the state consists of a long chain of coral atolls known as the Outer Islands of Yap. The 4,300 inhabitants of these atolls live the kind of lifestyle that has always been associated with the South Seas. The women dress in lavalavas and the men in loincloths; they sleep for the most part in simple houses built of wooden posts and thatch roofs; they subsist on the fruits of the land and the sea. Ships may visit these islands every two or three months, unloading canned food, cigarettes, and beer. The traditional island authority system is still largely intact on most islands. About 100 miles from the high islands of Yap lies Ulithi, the largest and most prestigious of the coral atolls. Woleai, Fais, Ifalik, Lamotrek and Satawal are some of the principal islands in the group. On nearly all these atolls men often gather in the late afternoon to drink *tuba*, the fermented sap of the coconut palm. The language chain spoken by these atoll dwellers is entirely distinct from the language spoken on the main islands of Yap; the dialects are more closely related to Chuukese. Virtually all Outer Islanders are Catholic.

Communities Surveyed

Ngolog (Rull) This village is located on the fringe of Colonia Town, the site of the government and commercial center. It is a residential area with a multiethnic population composed of Outer Islanders, Palauans, and a handful of Filipinos, Americans, and Japanese, besides Yapese. Many of those living in this village are government or business employees. An apartment building and a hotel are located in this community, as is the government radio station. Most of the residents have electrical power and telephones. The chief of Rull, one of the most important municipalities on Yap, lives there. The population is mostly Catholic, as in other parts of Yap.

Kanifay This municipality is located in the rather sparsely populated southern part of the main island of Yap. The villages here are so small that they consist of only a few households. For that reason, several villages were included in the community surveyed. The municipality can be called traditional, with most of the residents living off the land. Nonetheless, power and telephone service is available to those who want these amenities. Twenty years ago this area had earned a reputation as one of the main trouble spots on the island, for some of its youth formed motorcycle gangs and were regarded as belligerent towards others outside their area. The reputation has abated in time and now the village is known for its close cooperation on community projects. Several of the present residents are suspected to be ice users, however.

Maa/Thol (Tomil) This community, located in the eastern part of Tomil Municipality, straddles two different villages. One of them is the high caste village of Maa, while the other takes in part of the low caste village of Thol. Maa, the home of the present governor, is a thriving community with good public facilities. The village has a youth center that is used daily for basketball and volleyball games and youth meetings. The women's club runs a laundromat, and the girls present dances for tourists bussed into the village one evening a week. Most households have electric power and phone service. Thol, the low caste village, has few of these advantages that Maa enjoys. There are almost no modern buildings, very few of the villagers have electricity in their homes, and there are none of the community activities that distinguish Maa. This village seems to have many heavy drinkers and troublemakers.

Falalap (Ulithi) This small island in the Ulithi Atoll is the most cosmopolitan of the outer island communities. It is the site of Outer Islands High School, which draws for its enrollment from all the atolls in Yap State, and has a small paved airstrip used by the airline that flies into Falalap three times a week. There are other branches offices located on the island: a post office, the office of the governor's representative for the Outer Islands, and a small bank. The island is tightly linked to Yap by communications-government and private radios as well as the walkie talkies that are found everywhere on the island. The people are extremely friendly and generous to visitors. The men customarily gather in small groups in the canoe houses in the evenings to drink *tuba* and gossip about island events. Young girls seem to have taken to drinking in the last few years.

Mogmog (Ulithi) This islet lies about 20 miles from Falalap and is the traditional center of chiefly power in Ulithi. Except for a few people who have salaried positions in the elementary school or the dispensary, the residents live off the land. There are some concrete houses and a few generators, but the style of life is semi-subsistence for most people. *Tuba* and yeast drinking

are common among males here, and drinking is said to be on the rise among teenagers.

SURVEY INSTRUMENTS

1) HOUSEHOLD SURVEY RECORD SHEET

State _____ Village _____ House # _____

Total number living in household: _____

Head of household:

Name _____ Sex _____ Age _____

Household members:

Name _____ Sex _____ Age _____

Name _____ Sex _____ Age _____

Name _____ Sex _____ Age _____

Name _____ Sex _____ Age _____

Name _____ Sex _____ Age _____

Name _____ Sex _____ Age _____

Name _____ Sex _____ Age _____

Name _____ Sex _____ Age _____

Name _____ Sex _____ Age _____

Name _____ Sex _____ Age _____

Name _____ Sex _____ Age _____

2) INDIVIDUAL USER RECORD SHEET

State _____ Village _____ House # _____

Name _____ Sex: M F Age _____

Ethnicity: _____

Marital Status: Single Married Divorced Widowed

Wage Employment: No Yes If yes, where? _____

Education: Last grade completed in school _____

Student at present? No Yes If yes, where? _____

Travel abroad (6 months or more)? No Yes If yes, how long?

Drugs used: Alc Mar Coc Her Other _____

Gas/glue Sniffing? Y N

Alcohol

Frequency in last year:

___ almost daily

___ 3-4 days a week

___ 1-2 days a week

___ 1-3 days a month

___ less than once a month

Amount consumed in last year: avg number of drinks in one day _____

More than 5 drinks in one day? Y N

Frequency during last month:

___ almost daily

___ 3-4 days a week

___ 1-2 days a week

___ 1-3 days a month

___ less than once a month

Amount consumed in last month: avg number of drinks in one day _____

Binges lasting more than one day? Y N

Neglect of his responsibilities? Y N

How many binges in the last year? _____

When did last binge occur? _____

Problems related to drinking? Y N

___ illness or injury

___ missed work or duties

___ arrested for alcohol-related offenses

___ fighting while drunk

___ beating wife or children

___ other family problems

___ mental problems

Treatment for alcohol abuse sought? Y N

Serious drinking problem? Y N

Alcoholic? Y N

Marijuana

Smoked marijuana more than 2 times in the last year? Y N

Frequency of marijuana smoking:

___ almost daily

___ 3-4 days a week

___ 1-2 days a week

___ 1-3 days a month

___ less than once a month

Amount consumed: avg number of joints smoked in one day _____

Use of marijuana now? Y N

Problems related to use of marijuana _____

Other Drugs

What drugs used? _____

Use of these drugs now? Y N

Gas/Glue Sniffing

Sniffing now? Y N

How often? _____

3) INDIVIDUAL USER INTERVIEW INSTRUMENT

Alcohol

1) In the last year, has the person had something to drink

___ almost every day

___ 3-4 days a week

___ 1-2 days a week

___ 1-3 days a month

___ less than once a month

2) On days when he drank, about how many drinks on average would he have?

___ drinks in one day

3) Has he had more than 5 drinks in a day at any time during the last year?

4) During the last month, has he had at least one drink?

How many days did he drink?

On days when he drank, how many drinks did he take on average?

5) Has he ever gone on binges where he has kept drinking for a couple of days or more without sobering up?

Did he neglect some of his usual responsibilities at those times?

About how many times has this happened in the last year?

When was the last time this happened?

6) Has he ever had problems related to his drinking?

Has he ever been admitted to the hospital or treated in the hospital or dispensary or at home for alcohol-related illness or injury?

Has he ever missed work or neglected his other responsibilities due to his drinking?

Has he ever been arrested for alcohol-related offenses?

Has he been involved in fights with others while he was drunk?

Has he beaten his wife or children or other relatives when drunk?

Has he experienced other problems with his family—for instance, arguments with family members, his wife threatening to leave him or actually doing so because of his drinking?

Has he shown any signs of mental problems—for instance, talking to himself, hallucinations, hearing voices, avoiding other people, or unpredictable behavior?

8) Has he ever sought treatment for alcohol abuse in any kind of anti-alcohol program (AA, church programs, private counseling, etc)?

9) Does he, in your judgment, have a serious drinking problem?

10) Is he addicted to drinking?

Marijuana

1) Has he used marijuana more than 2 times in the past year?

2) How frequently did he smoke marijuana?

How many days a month?

How many joints on days that he smoked marijuana?

3) Does he still use marijuana now?

4) Has he experienced any problems in connection with his use of this drug?

Other Drugs

1) Has he ever used other, stronger drugs than alcohol and marijuana?

hallucinogens: PCP, LSD

cocaine: coke, crack

heroin or other opiates (Codeine, morphine, Demerol)

amphetamines: speed, ice, "uppers", Benzedrine

2) What kind of drugs has he used?

3) Does he still use these drugs?

Gas/Glue Sniffing

1) Has he sniffed gas, glue, or any other inhalant during the last year?

2) How frequently has he done so?

TREATMENT AND PREVENTION AGENCIES

Pohnpei

Pohnpei Substance Abuse and Mental Health Program. The official state government agency for alcohol and drug treatment, the center is located in its own building, which was renovated a few years ago by US SAMHSA block grant funds. It is administered by Pohnpei State Health Services and largely funded by SAMHSA block grant funds, with Pohnpei State contributing the salaries of the coordinator and one nurse. They operate with \$90,000 from the block grant and the equivalent of another \$30,000 in salaries from Pohnpei State. The administrator is Midion Iohp. There are 12 people on the staff, five of whom are stationed in the communities (Madolenihmw, Sokehs, U, Pingelap and Ngatik). The aims of the organization are to provide counseling and medication for the mentally ill. They also do some community education such as presentations in the schools on drug awareness and talks to groups of parents, teachers and community leaders. The community workers identify potential cases, monitor and evaluate them and make referrals to the main office in Kolonia for counselling. Some of the severe cases are referred to Guam. The total number of persons served in 1995 was 74 (70 males, 4 females), over 90% of whom were alcohol and drug abusers.

PADY (Pohnpei Awareness and Drug-Free Youth). This is a task force formed by the Governor of Pohnpei and composed of the heads of six government agencies and an NGO that attempts to coordinate their work to prevent drug abuse by educating the population. The agencies are: Department of Public Safety; Division of Youth Services of the Education Department; Mental Health and Substance Abuse Program of the Department of Health Services; Head Start; Aramas Kapw, the Pohnpei branch of Micronesia Bound Inc; Probation Services of the Pohnpei State Supreme Court; and the Pohnpei Women's Council. The PADY network seems to undertake no joint activities, but it attempts to keep all informed of what each of the organizations is doing and to pass on information on funding sources for drug awareness education.

DARE (Drug Abuse Resistance Education). Although this program is FSM-wide, it is far more active in Pohnpei than in the other states. The program is modeled on a US project that had police officers going to the schools and lecturing school children on drugs. The purpose of the original US project was to create a more positive image of the police and counter the impression of police brutality. Lester Ruda, a former national police officer, is in charge of the FSM DARE Project, which is funded by Pacific Insular Region Anti-Abuse Program (PIRAAP) through the US Department of the Interior. Between 1991 and 1995, PIRAAP provided \$1.2 million to FSM. The Pohnpei DARE program received \$50,000 last year for the training of police officers and incidental expenses. Three police officers from Pohnpei go around to the schools talking to the kids. Frank Semens is in charge of the project at the Pohnpei level.

Aramas Kapw. This program, meaning "New People," was established in 1976 after the model of the US Outward Bound programs. Similar programs were once run in Chuuk and Palau, but Pohnpei's is the only one that survived. Aramas Kapw is under the authority of a non-profit corporation known as Micronesia Bound, Inc. The program challenges at-risk youth with tough physical challenges such as mountain climbing, rappelling down cliffs, solos in the rainforest for two or three days, swimming and canoeing, and drownproofing. It also emphasizes development of interpersonal skills, especially for young people who are impaired in these skills. A full course lasts 22 days, and the course is offered about four times in the ordinary year. The program enlists 140-160 young people in the course each year. Those who take the course are teenagers, mostly boys between the ages of 13-22, although some are young men in their late 20s. They are chosen from among those referred to Aramas Kapw by the courts, Mental Health and Substance Abuse Program, and the schools. The program follows graduates for two years, keeping a file on each person who takes the course. They try to get the young people through high school, giving priority to them in the GED exams so that they can get their high school diploma. They may also do follow-up interviews now and then during this time. The program offered lectures to all its graduates this year on alcohol and drug use, among other topics.

Morehna Rettin, the director of the program, is assisted by a staff of six and a part-time accountant. The program operates on about \$80,000 a year. Funding has come from the Substance Abuse and Mental Health block grant, but there is also some supplemental funding from the Pohnpei legislature and/or the FSM Congress.

Division of Youth Services. This division is part of the Bureau of Social Affairs, Pohnpei State Government. Tesiwo Liwy heads the Bureau of Social Affairs, but there is no one appointed to head the Youth Services Division at this time. The purpose of this division seems to be to coordinate programs among the various youth groups on the island, of which there are 57 registered organizations. It registers these youth groups and arranges for competitions (eg, music contests and fishing contests) among the groups. It also oversees the local chapter of the Boy Scouts and is responsible for the Pohnpei Sports Council. The Division of Youth Services holds yearly youth conferences.

Youth Groups. There are 57 registered youth groups on Pohnpei, and presumably many others that have not received formal recognition from the government. A number of these are church-sponsored groups. Among the most prominent are the Deniwei Youth Christian Association (DYCA), which is composed largely of Mokilese and is run by the UCC church in Deniwei, and the Kapinle Protestant Youth (KPY), also made up of Mokilese. Although not targeted at drug or alcohol abuse prevention, these youth organizations organize activities for the young and exercise considerable social pressure over them to conform to church expectations.

Kosrae

Kosrae Substance Abuse and Mental Health Program. This state program is part of the Kosrae Department of Health Services and is funded by a US Substance Abuse and Mental Health block grant. Matchuko Talley, a registered nurse, heads the program. She is assisted by seven staff members—a counselor, an administrative assistant, and five community aides. The program handled 20 cases during 1995, all of them males and most related to alcohol and drug abuse. The program has worked out a referral system with the State Court to provide counseling for young offenders. Their major efforts seem to be directed toward prevention rather than treatment, however. They produced 12 radio programs on prevention in the local language, and did some work educating people in the villages through other programs such as CHIP-In (Child Health Improvement Project-Intervention).

KASAP (Kosrae Anti Substance Abuse Program). This is an NGO funded by PIRAAP and headed by Nena Tolena. There are two other staff members, a counselor and outreach agent. The program operates on \$50,000 a year; its funding began in 1994 and will terminate in September 1997. The head of the program plans to seek funding elsewhere to enable the program to continue after the expiration of the PIRAAP funds. KASAP's focus was entirely on prevention activities. These consisted of youth workshops, meetings with parents in the villages, presentations to school children, lectures to government office staff, youth summer camps and poster contests.

Etawi. This is an island-wide church group for youth that tries to help young people refrain from drinking and drug use. The name comes from the Kosraean word for "imitate" or "follow." It seems to operate through the island and has been rather successful in keeping youth on the straight and narrow.

Chuuk

Chuuk Substance Abuse and Mental Health Program. This state program for alcohol and drug treatment is run under the auspices of the Health Department and is located in the state hospital with an office complex of its own. Virtually the entire funding, \$121,000, comes from the SAMHSA block grant. The program is headed by Dr. Imauo Akitekit and staffed by 17 other persons: a program coordinator, a clerk, a boatman, and a computer operator, as well as two nurses, three counselors, two community educators, and six community workers. The program operates out a building next to the hospital, with a reception room, private offices, and a recreation area with TV for patients. The program handled a total of 26 cases in 1995, most of them drug and alcohol abuse cases, in addition to making home visits to mental patients to provide anti-psychotic medication. The staff reports going to schools and youth groups to speak about drugs, although no schedule of activities is available. It appears that the program focuses almost exclusively on treatment rather than prevention.

COCA (Chuuk Office of Community Action). This is a single-program agency that runs the Head Start program for pre-elementary school children. Funding for Head Start comes from US Department of Health and Human Services and totals \$1.4 million yearly. Carmina Billy has been the director of COCA for many years. The Head Start program has 42 centers throughout Chuuk, each one staffed by three persons. Those working in these centers make home visits and speak to the parents about the dangers of drug abuse as part of their outreach program. Hence, drug prevention is a real, although minor part of the Head Start program that COCA runs.

Youth Groups. Many communities have their own youth groups, with such activities as song competitions, athletic events, picnics and regular meetings. A constant theme in their meetings is the desirability of avoiding alcohol and drugs. Most of these youth groups are church-run, either Catholic or Protestant. Such groups are a strong feature of most communities, stronger still in the more distant islands than in the towns and population centers.

Yap

Yap Substance Abuse and Mental Health Program. This state agency is under the Health Department and its office located in the state hospital. The agency's funding of \$26,000 a year is derived, in equal shares, from the SAMHSA block grant for FSM and from the Yap Legislature. Yap is the only state that provides from its own

resources a major share of the funding for its SA/MH government office. Julie Yoruw and Robert Yangerluo staff the office, assisted by three others (two counselors and a data entry clerk). They counsel individuals who seek treatment or are referred to them, and keep records on drug abuse and social indicators associated with drug abuse. They reported dealing with mentally ill, candidates for suicide, and battered spouses in addition to those with drug problems. In 1995 they reported handled 38 cases of substance abuse: 33 males, 5 females. In addition to this treatment for substance abusers, they conduct prevention activities such as visits to schools to give talks on drug awareness, workshops for Head Start teachers, and presentations at youth congresses. They also meet regularly with all the other agencies that do youth work and drug counseling.

YAP RAP (Youth and Parents, Rehabilitation and Prevention). Yap Rap is a program supported and administered by the Yap Judiciary; its offices are located in the state court building. The program is funded entirely by the Yap Legislature at \$26,000 a year. Carmen Chigiy runs the program and is assisted by three others, all of whom are in their early 20s and do peer counseling. Yap Rap offers treatment in the form of counseling for youth troubled by almost any sort of problem, suicidal tendencies and physical abuse as well as alcohol or substance abuse. Yap Rap does virtually no prevention work, although it collaborates with other agencies on island-wide programs at times.

Touplay Ne Yefas. This program, whose Yapese title can be translated as "Mending Lives," is sponsored by the Catholic Church and headed by Sr. Marie May. A few Yapese have worked in this program on a volunteer basis, but there are no full-time employees. At-risk students or offenders are brought to a camp in a sparsely settled area of Tomil where they farm, do other work and interact with one another for three months. The program has had relatively few participants since its inception, and that number has dropped to almost zero. The sources of funds are private contributions and the funding level is unknown. The simple thatched huts that were used to house the participants in the program and hold meetings were blown down in the typhoon in December 1996.

Yap Star. This program was begun in 1995 by three American Peace Corps volunteers working at Yap High School. It aims at counseling students against drug use and intervening where necessary in cases of abuse or family problems. The clients include dropouts as well as students from the high school. No special funding is available to the program; it makes use of the resources of Yap High School. With the departure last summer of the three young Americans who founded the program, the program is fading.

Youth Services Office. This government office is responsible to the Department of Youth and Civic Affairs. Funding of \$32,000 yearly comes from the Yap Legislature. The office has a staff of four, but the position of chief of the Youth Services Office is vacant at this time. The office runs a summer youth program lasting eight weeks that is aimed at offering youth the chance to gain job experience and work skills. The office also sponsors some year-long youth activities- sports tournaments, clean-up programs, and youth fairs. They engage in no drug counseling or treatment per se, but run youth activities broadly targeted at prevention.

Second Chance. Although this program is headquartered in the Yap Youth Services Office, it is run as a private program. Once entirely supported by this government office, "Second Chance" has been awarded \$21,000 funding from the SAMHSA block grant during the current year. Thomas Tun is the supervisor of the program; he has a staff of seven others-an assistant and six field workers. The program takes in up to six young men with troubled histories at any one time and keeps close tabs on them for a three to six month period. The youth taken into the program are assigned to one of the field workers and are expected to work closely with him. The youth shadows his field worker, playing and working with him, talking to him, and identifying with him, it is hoped. "Second Chance" tracks those who have gone through the program to follow their progress. Since its beginning in 1993, 72 young people have been engaged in the program. About half of them have found jobs or are back in school, according to the data supplied by the office.

Police Public Relations Section. The police in Yap run a program similar to the DARE Program on Pohnpei. Headed by Charles Filmeyog and staffed by two other police officers, the team goes around visiting schools to give youth an understanding of what policemen do and how the department works. During their visits, they give talks on drug abuse and crime, warning students what will happen to them if they commit crimes. While they attempt to build good relations between the police and the community, the team also pitches their talks at drug prevention. In addition, they track all juveniles (ie, under the age of 18) who have been arrested and they monitor their probation. In doing this facet of their work, they counsel these youth and provide advice to their parents. Funding for the program comes from the Department of Public Safety.

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